10/4/83 S9160-1(W) A

Minnesota

LABOR MARKET INFORMATION

Summary

For 1984

A report from the Minnesota Department of Economic Security concerning recent and expected economic and job market conditions – especially their effect upon those facing barriers to obtaining and keeping jobs.

MINNESOTA

Labor Market Information Summary

FOR 1984

Prepared By

RON DAWS
296-6756

The
Research & Statistical
Services Office

September 1983

Minnesota Department of Economic Security

Table of Contents

		Page
Introduction		iii
I.	Demographics, Sociological, and Economic Developments	1
	Population	1
	Education	4
	Family Size	6
	Influence of National Economic Trends	9
	The State Economy	10
	Income and Poverty	16
	Unemployment	19
	Employment Forecast for 1984	21
II.	Labor Demand and Supply Conditions	24
	Labor Demand	24
	Labor Supply	26
III.	Groups Targeted for Employment Related Services Under JTPA	35
	Defining and Estimating the Targeted Groups	36
	Methodology for Estimating Targeted Groups	37
	Estimates of Targeted Groups by SDA	44
Appendix		45

TABLES

		Page
1.	Minnesota Population Projections For 1984	3
2.	Minnesota Population By Race, 1980 Census And 1984 Projections	4
3.	Counties With The Largest Percentage Population Changes	5
4.	State Totals Of Public Secondary School Membership And Dropouts	6
5.	Years of School Completed By Minnesotans: 1970 And 1980	6
6.	Marital Status In Minnesota: 1970 And 1980	7
7.	Distribution Of Population By Age Group: 1970, 1980, And 1990	8
8.	U.S. Labor Force Series	11
9.	Minnesota Employment By Industry: 1975 Through 1982	13
10.	Minnesota Handbook Labor Force Data	14
11.	Comparison Of Per Capita Income Increases: MN And U.S.	16
12.	1979 Income Levels	17
13.	Average Weekly Insured Unemployment: Minnesota, 1970-1982	20
14.	Minnesota Population, Labor Force, And Participation Rates: 1974-1984	22
15.	Minnesota Labor Force: Annual Averages	22
16.	Projected 1974 Population, Labor Force, Participation Rate & Unemployment By Age Group And Sex For Minnesota	23
17.	Job Service Applicants, Openings, And Placements	25
18.	Characteristics Of The Insured Unemployed During 1971 By Industry Attachment	27
19.	Characteristics Of The Insured Unemployed During 1982 By Occupational Category	28
20.	Characteristics Of The Insured Unemnployed During 1981 By Industry Attachment	29
21.	Characteristics Of The Insured Unemployed During 1982 By Industry Attachment	30
22.	Occupational Characteristics Of Experienced And Entry Level Job Applicants In 1982	31
23.	Occupational Characteristics Of Female Experienced And Entry Level Job Applicants In 1982	32
24.	Characteristics Of Job Applicants in Minnesota: FY 1982	33
25.	Characteristics Of Female Job Applicants In Minnesota: FY 1982	34
26.	1984 Estimates Of Targeted Groups Under JTPA	44
27.	Minnesota Labor Force Data, Official CPS Adjusted Series	46

CHARTS

1.	Percent Change In Population Between 1970 And 1990, By Age Group	2
2.	Minnesota Employment And Unemployment Rates By Month: 1981, 1982, & 1983	15
3.	Percent Change In The Consumer Price Index Since Dec. 1979, By Major Component	19

INTRODUCTION

This report is a reference document for anyone interested in Minnesota's population trends, sociological factors such as educational level, family size, and income trends affecting the economy and labor market, the employment related services under the Job Training Partnership Act (JTPA).

The Report is divided into three sections. The first explores recent developments in the demographics, income levels, and the labor force have affected and are likely to affect various groups of job seekers in their search for work. The second section addresses recent labor supply and demand conditions, and the characteristics of the unemployed.

Definitions and methodologies that have been developed to estimate the number of persons who fall into various categories targeted for training services in each Service Delivery Area (SDA), as well as the estimates themselves, are covered in the third section.

This is but one of five such publications covering the State. The others cover, in greater detail, the Minneapolis-St. Paul, Duluth, Rochester, and St. Cloud SMSAs. They are available from the Research and Statistical Services Office, Minnesota Department of Economic Security, 390 North Robert Street, St. Paul, Minnesota 55101.

I. DEMOGRAPHICS, SOCIOLOGICAL, AND ECONOMIC DEVELOPMENTS

Population

RECENT AND EXPECTED DEMOGRAPHIC SHIFTS

Changes in the structure and size of the State's population play a substantial role in determining economic climate. Most obvious has been the impact of the "baby-boom" of the late 1940s and 1950's, first as these children grew up and swelled the school system, and then as they matured and left a glut of teachers and facilities in their wake when they began to enter the labor force. Since 1975, the working age population has been increasing rapidly. Between 1984 and 1990, the number of those aged 21-44, for example, is expected to increase by another 20 percent, while the general population is expected to increase by five percent.

As the number of young people reaching working age increased and looked for work in unprecedented proportions, it put pressure on the competition for entry level jobs during the 1970s. Consequently, until recently, half of all unemployed persons in Minnesota have been less than 25 years old.

Around 1980, the school aged population began to drop as result of declining birth rates during the late 1960s and 1970s. The decline was and will be much sharper among whites, since birth rates for minorities have declined less than for the white population. Between 1980 and 1983, the number of those under 15 years of age remained fairly constant, while those between ages 15 and 20 dropped by nine percent. Between 1984 and 1990, the number of those under age 15 is expected to increase by about five percent as a result of females born during the "baby-boom" now coming into their child bearing years, and not because of any major increases in birth rates.

During the 1970s, Minnesota's population grew at the slowest rate of any decade since the 1940s, and the second slowest of any decade in the State's history. During the 1950s, the population increased 14.5 percent, and during the 1960s by 11.5 percent, but during the 1970s, it increased by 7.1 percent. The projection for the 1980s is roughly the same as for the 1970s, a gain of about 7.2 percent. Chart 1 shows population trends for various age groups, clearly illustrating the dramatic increases of those aged 25-44, and the temporary decline and subsequent slight gain of those under age 15. Table 1 displays the State's projected 1984 population by age group, whites, and nonwhites. Table 2 compares the State's population, by race, for

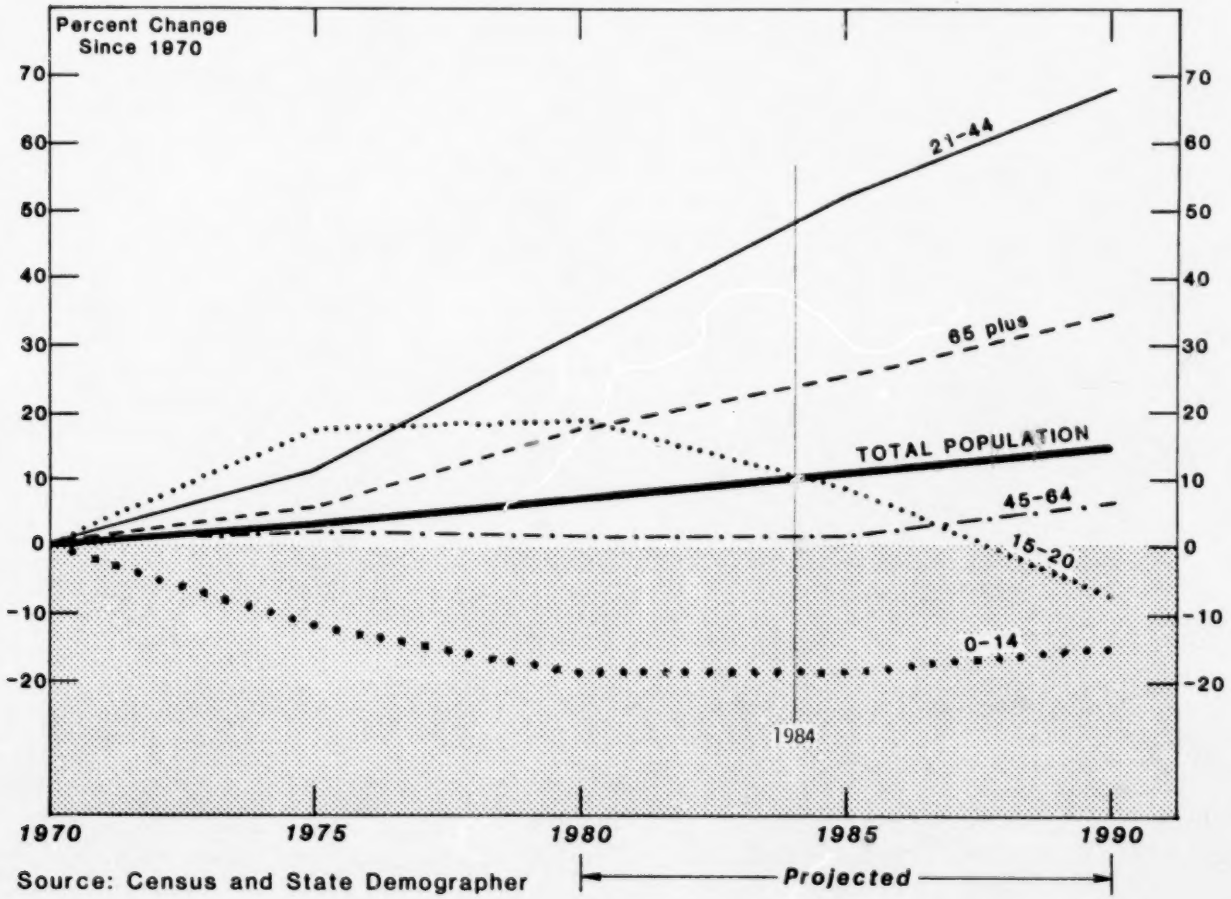
1980 and 1984.

GEOGRAPHICAL DIFFERENCES

Population growth has been most rapid in the outer suburbs of the Twin Cities area, and to a lesser degree, in the northcentral and northwestern parts of the State. The vast majority of this increase was due to relocation of families from other parts of the State. The movement of people into the suburbs during the 1970s, combined with declining birth rates, has meant slower population growth for the most cities of 20,000 and greater. Minneapolis and St. Paul, in fact, lost population. Agricultural areas are growing only slightly, or losing people. Thus, the State's population is becoming increasingly suburban.

Chart 1

Percent Change In Population Between 1970 and 1990 For Various Age Groups In Minnesota



During the 1980s, southern and western counties of the State are expected to lose people due to migration, both to other parts of the State, and out of the State. For the State as a whole, however, the the long standing trend of slight net out migration seems to have shifted to one of slight in migration. The counties with the greatest expected population changes between 1980 and 1984 are shown in Table 3.

Table 1

Minnesota Population, 1984 Projection
(In Thousands)

	White and Nonwhite			White		Nonwhite	
Age Group	Total	Male	Female	Male	Female	Male	Female
Total	4196.9	2058.0	2138.9	1987.6	2065.2	70.4	73.7
0-15	1008.5	516.2	492.2	490.4	466.5	25.8	25.7
0-4	329.5	169.2	160.4	159.5	150.7	9.7	9.7
5-9	305.9	156.6	149.3	147.8	140.6	8.8	8.7
10-14	305.2	156.1	149.1	149.9	142.9	6.2	6.2
15	67.9	34.4	33.4	33.2	32.2	1.2	1.2
16+	3188.4	1541.7	1646.7	1497.1	1598.7	44.6	48.0
16-19	280.7	142.5	138.3	138.0	133.7	4.5	4.6
20-24	394.0	198.1	196.0	191.1	188.8	7.0	7.2
25-29	382.5	190.3	192.2	181.7	183.5	8.6	8.7
30-34	350.4	175.6	174.8	168.5	167.4	7.1	7.4
35-39	297.0	148.6	148.4	144.1	142.9	4.5	5.5
40-44	236.5	118.1	118.4	114.8	114.7	3.3	3.7
45-49	196.4	97.6	98.7	95.3	95.8	2.3	2.9
50-54	183.8	90.8	93.1	8.9	91.0	1.8	2.1
55-59	185.9	90.6	95.3	89.1	93.7	1.5	1.6
60-64	175.3	83.6	91.7	82.4	90.4	1.2	1.3
65-69	153.2	69.5	83.7	68.5	82.6	1.0	1.1
70-74	128.1	55.1	73.0	54.1	72.1	1.0	0.9
75-79	97.8	38.8	59.0	80.4	142.1	.9	1.1
80-84	68.0	24.3	43.7	80.4	142.1	.9	1.1
85+	58.7	18.2	40.5	80.4	142.1	.9	1.1

Source: 1980 Census and State Demographer projections for 1985.
To estimate 1984, a straight-line interpolation between 1980 and 1980 was used.

Education

The level of education has always been correlated strongly with earning power and job satisfaction. Even during the recessions, a college degree still has leverage in securing the more prestigious positions. However, college degree is no longer nearly a guarantee of getting hired in a job that is commensurate with one's education. Nationally, between 1970 and 1980, only about four out of five college graduates found professional, technical, managerial, and other jobs that have traditionally gone to those getting a college degree. The remainder entered retail sales, service, farm, and blue collar jobs, occupations that had employed few college graduates previously. Those who did not take any job, or frequently jumped from job to job, helped (along with the recession) to raise the unemployment rates for college graduates.

To the credit of Minnesotans, they are better educated (in terms of years of education) than the avererage American. In 1980, 85.2 percent of all high school students in Minnesota graduated, compared with 74.4 percent nationally. Minnesota also has a higher incidence of those with four or more years of college, but the difference is much narrower, 17 percent for the State and 16 percent for the U.S.

Over the decade of the 1970s, as Table 4 shows, Minnesotans aged 25 or older stayed in school longer.

Table 2

Minnesota Population By Race
1980 Census and 1984 Projections

	1980 Census	1984 Projection
Total	4,077,148	4,196,900
White	3,936,948	4,052,800
Black	53,342	55,500
American Indian	35,180 1/	46,800
Southeast Asian	26,533	29,200
Spanish Origin	32,124	33,400

1/ The Census is known to undercount American Indians. Our estimate of the number of Indians in Minnesota during 1980 (based on Dept. of Health estimates) is 40,300.

This trend is somewhat mitigated by the rising dropout rates of public secondary school students over the second half of the 1970s. It is believed that the dropout rate began to fall again during the 1980-81 school year, both because rising unemployment underlined the need for education, and because there were fewer jobs available for those who left school. Dropout rates are expected to hover around 3½ percent through 1984.

Increasing proportions of teenage students ease into the world of work by seeking temporary or part-time jobs. Although students were less likely than non-students to be in the labor force, in 1982 nearly

Table 3

Counties With The Largest Percentage Population Changes
Population: 1970,1980, Projected 1984 and % Δ 1980 - 1984

Area	1970 1/	1980 1/	1984 2/	% Δ 1980-1984
Minnesota	3,806,103	4,075,970	4,196,900	3.0
Anoka	154,600	195,998	208,680	6.5
Becker	24,400	29,336	30,858	5.2
Beltrami	26,373	30,982	32,588	5.2
Benton	20,841	25,187	26,757	6.2
Carver	28,331	37,046	40,091	8.2
Cass	17,300	21,050	22,240	5.7
Chisago	17,492	25,717	28,972	12.5
Crow Wing	34,800	41,772	44,050	5.5
Dakota	139,800	194,279	217,312	11.9
Dodge	13,000	14,773	15,611	5.7
Douglas	22,900	27,839	29,585	6.3
Hubbard	10,583	14,098	14,748	4.6
Isanti	16,560	23,687	26,425	11.6
Itasca	35,530	43,069	41,578	4.9
Kandiyohi	30,548	36,763	38,525	4.8
Olmstead	84,100	92,006	95,641	4.0
Scott	32,423	43,784	47,740	9.0
Sherburne	18,344	29,906	35,498	18.7
Stearns	95,400	108,161	113,211	4.7
Todd	22,114	24,991	26,674	6.7
Washington	82,900	113,571	124,597	9.7
Wright	38,900	58,681	65,813	12.2
Hennepin	960,080	941,180	948,893	0.8
Ramsey	476,255	459,784	460,450	0.1

1/ Census

2/ State Demographer projections.

Table 4

State Totals of Public Secondary School Membership and Dropouts
1975-76 to 1980-81

	75-76	76-77	77-78	78-79	79-80	80-81
Number of Students Oct. 1, Grades 7-12	453,680	448,008	434,203	415,870	397,188	381,726
Total Dropouts	12,848	13,902	14,771	16,245	17,002	13,620
Dropout Percentage	2.8%	3.1%	3.4%	3.9%	4.3%	3.6%

Source: State Department of Education

Table 5

Years of School Completed By Minnesotans
1970 and 1980

	1970		1980	
	Number	Percent	Number	Percent
Total Persons, 25 years old and over	1,990,367	100.0	2,345,701	100.0
0-8 years	556,065	28.4	391,854	16.7
9-11 years	278,000	14.0	240,294	10.2
12 years	687,242	34.5	904,382	38.6
13-15 years	238,128	12.0	401,890	17.1
16 or more	220,932	11.1	407,281	17.4

half of all the nation's unemployed teenagers were enrolled in school. For those aged 16-24 who have dropped out of school, their unemployment rate was 31.8 percent in October of 1982, nearly double that of high school students of the same age.

Family Size

During the 1970s, adults in Minnesota shared the national tendancy toward marrying later and less frequently, having fewer children, and getting divorces in increasing proportions. The most direct results of these developments is that the ratio of husband-wife families with children under age 18 has declined, the proportion

Table 6

MARITAL STATUS IN MINNESOTA: 1970 AND 1980

Marital Status	1970	% of Total	1980	% of Total	Absolute Change	% Change 1970-80
TOTAL POPULATION 15 and over	2,653,425	100.0%	3,138,955	100.0%	485,530	18.3%
Single	681,260	25.7	882,928	28.1	201,668	29.6
Married	1,685,005	63.5	1,851,598	59.0	166,593	9.9
Divorced	65,269	2.5	154,956	5.0	89,689	137.4
Widowed	203,009	7.7	219,519	7.0	16,510	8.1
Separated	18,882	0.7	29,954	1.0	11,072	5.9

Source: 1980 Census

of single-parent families has risen, and the average household size has dropped. All of which caused the number of households to swell dramatically.

This has profound implications for the labor force and the economy in general. More households adds to the demand for the kinds of services necessary for maintaining living quarters, and strains the supply of housing as evidenced by a 25 percent growth in rental units and soaring sale prices for houses during the 1970s. Rising costs for rent and housing, combined with the rapidly increasing number of young female-headed families, drove many young workers, especially women, into the labor force. Those who were successful in finding jobs swelled the employment roles; those who were not, pushed up the incidence of unemployment among workers under 25 years of age (as stated earlier, roughly half of the State's unemployed were under age 25).

The reasons behind these trends have a lot to do with changing social customs and life-styles. Remaining unmarried no longer carries the social stigma it once did. Nor does separation and divorce. Consequently, despite the aging of the baby-boom population into the prime family formation years, the number of married couple families increased by only slightly more than the overall population growth. That young people are holding off on marriage is convincingly illustrated by looking at the 1970 and 1980 Censuses. While the number 25-34 year olds increased by 51 percent over the decade, the number of husband-wife families with a 25-34 year old householder increased by only 24 percent. Even more striking was the pattern of 15-24 year olds. The number of married couples with a 15-24 year old household declined, while the 15-24 year old population increased by 19 percent.

However, family householders were younger on average in 1980 than during 1970. In 1980, 31 percent of the family householders were under age 35, compared with 28 percent in 1970. Consequently, with younger householders in 1980, it would seem reasonable that the proportion of families with young children would have increased. In fact, the opposite occurred. The percentage of husband-wife families with children under age 18 declined from 59 percent to 54 percent, in part because married couples delay having children longer now than they did in the past. The result is slower growth in the number of husband-wife families, increasing numbers of those who are childless, and a smaller number of traditional families composed of a couple with children.

The proportion of Minnesotans who are married declined from 64 percent in 1970, to 59 percent in 1980. Conversely, the number of those never married rose from 26 percent in 1970 to 28 percent in 1980. Consequently, with the population increasing by only 7 percent between 1970 and 1980, the number of households rose 25 percent. Household size, of course, decreased. From an average of 3.20 persons in 1970, it dropped to 2.74 in 1980.

Because of the large increase in the number of those aged 20-34, more separations and divorces, and more out-of-wedlock births (especially among the young), there were twice as many female family householders aged 15-34 in 1980 as there were in 1970. More children now live with a single parent, 86 percent of them with their mother. The number of families with a male as head increased also, but there are only one-third as many as those with female head.

Non-family households have tended to be younger during the 1970s. In fact, while 27 percent of the non-family households were headed by those under 45 years of age in 1970, 47 percent were in 1980. The

Table 7

Distribution of Population by Age Group
1970, 1980 and Projected 1990
Minnesota

Age Group	Population (000s)			Percent Dist.			Percent Change	
	1970	1980	1990	1970	1980	1990	1970-80	1980-90
Total, All Ages	3805.0	4076.0	4371.1	100.0	100.0	100.0	7.1	7.2
Under 15	1149.4	936.9	983.2	30.2	23.0	22.5	-18.5	4.9
15-24	665.4	793.4	622.8	17.5	19.5	14.2	19.2	-21.5
25-44	851.9	1125.8	1435.4	22.4	27.6	32.8	32.2	27.5
45-64	729.3	740.3	780.7	19.2	18.1	17.9	1.5	5.5
65+	408.9	479.6	549.0	10.7	11.8	12.6	17.3	14.5

Source: Census

reasons are many, but basically they have to do with social changes. The desire for more money and education may have led many to postpone marriage. The divorce rate also doubled from 2.5 percent in 1970 to 5 percent in 1980. While 26 percent of those aged 20-34 were single in 1970, almost 37 percent were in 1980. Combined with 43 percent more 20-34 year olds in 1980 over 1970, this has led to a doubling in the number of 20-34 year olds who have never married. One boom for the economy from all this has been the increase in popularity of discos, single's bars, computer dating, and dining out.

Table 5 shows the disproportionate rise in the incidence of divorced and single persons in the State from 1970 to 1980, as well as an increase in the number of married, widowed, and separated persons that did not keep up with the overall increase in population.

Table 6 shows that Minnesotans now have more years of schooling than they did in 1970, while Table 7 compares the distribution of the State's population by age group for the years 1970, 1980, and projected 1990.

Influence Of National Economic Trends

The Nation hardly had time to catch its breath after the recession of late 1979. The recession which began officially in mid-1981, was by many accounts, not only the worst in the postwar era, but it was preceded by the shortest recovery in 44 years. It is clear now that the U.S. Economy has again entered an expansionary phase of the business cycle. The recession was declared over in November, 1982, and while the recovery may not be the strongest since W.W. II, it seems to be gaining enough momentum during 1983 to propel itself at least into 1984.

Shaking off two years of hard times, the U.S. GNP expanded at a spirited 9.2 percent annual pace during the Second Quarter of 1983, the strongest performance since early 1981. That was still only slightly above average for a Post W.W II recovery, but it was hampered by high interest rates, budget deficits, and a highly valued dollar which makes exports less attractive to our slower recovering trading partners. When contrasted against the 0.9 percent ecoomic contraction in 1982, 9.2 percent expansion looks good. According to Martin Feldstein, Chairman of the President's Council of Economic Advisors, by years' end, the rate of economic growth is expected to average out to 5.5 percent after adjustment for inflation.

Even though the recovery got off to a slow start in the first quarter of 1983, the Nation's factories were already operating at their highest levels in 15 months. The activity appears to be broadly based across most industries, particularly textile, rubber and plastics, primary metals, motor vehicles and parts industries. New housing starts began to climb after riding a slump, and by the second quarter of 1983, they exhibited a significant increase from 1982.

One of the single-most accurate and important barometers of business recession and expansion is the

Federal Reserve's index of industrial production, which shows that by mid-1983, the economy had expanded by seven or so percent over the year. There were strong gains in consumer spending as personal income rose in the Spring of 1983. Most of this increase was real as price inflation moderated. Consumerism has reduced inventories to their smallest levels in recent years. However, they are not likely to be replenished quickly because of relatively high interest costs. Also, low inflation induces businesses to take their time replenishing their stocks because the threat of rapidly climbing prices, which induces one to buy now now and pay later, is no longer there. Rather than increase inventories, businesses will likely use their improved cash flow to pay off debts. Then too, the fact that consumers have cut back sharply on savings may affect future spending, although many economists and businesses are relying on the federal tax cut enacted July 1 to keep consumer spending at a reasonably solid level.

Some economists believe that the recovery into 1984 will be the best "since the Korean War period". But in spite of the recent upturn, businesses and workers still remain a little "shell-shocked" and concerned about the future. The more cautious forecasters feel that interest rates are still too high to allow such a rosy picture to materialize. Some argue that high interest rates can be avoided only if Congress acts to reduce Federal budget deficits.

Additionally, though on the mend, employment averaged 1.5 percent below 1982 levels for the first seven months of 1983 and will have to expand rapidly to reach 1980 levels. Also, while unemployment has dipped below 1982 levels, it still averaged 2.9 percent higher during the first seven months of 1983 than during the same seven months in 1982 (See Table 8). As long as interest rates remain high, automobiles, homes, and other big ticket purchases are not expected to improve their sales performances much beyond current levels. Persistent excess money growth and financial market fears are the things that keep interest and inflation rates up.

Next year, the demand for short-term funds by the private sector will increase at the very moment the Federal Reserve is likely to become more restrictive with money. If the Federal government continues to raise large sums in money markets to finance its huge deficits, it could raise interest rates sharply, and in turn, trigger another recession.

The State Economy

In many ways the State's economy has followed the Nation's, except that unlike most past recessions, the 1982 downswing in employment outpaced the Nation's. Contributing to the severity of the State's downturn was that it spread into the Services sector, whereas Nationally it did not. Although a solid recovery is now underway, employment still remains depressd and unemployment only began to decend from record highs in the second quarter of 1983.

One fact that stands out with respect to the recent recession is that Construction and Manufacturing employment fell by more in 1982 than in any other recesionary year

Table 8

U.S. Labor Force Series, Actual Data

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Average
						1981							
Civilian Labor Force	106885	107015	107634	107906	108586	109904	110742	110099	108273	109244	109179	108574	108670
Emp.	98139	98401	99364	100345	100855	101419	102612	102152	100389	101028	100502	99562	100397
Unemp.	8746	8614	8271	7561	7731	8485	8130	7947	7884	8216	8676	9013	8273
Unemp. Rt.	8.2	8.0	7.7	7.0	7.1	7.7	7.3	7.2	7.3	7.5	7.9	8.3	7.6
						1982							
Labor Force	108014	108324	108761	108814	109914	111569	112526	111887	110546	110767	110855	110477	110204
Emp.	97831	97946	98471	98858	99957	100683	101490	101177	99851	99825	99379	98849	99526
Unemp.	10183	10378	10290	9957	9957	10886	11036	10710	10695	10942	11476	11628	10678
Unemp. Rt.	9.4	9.6	9.5	9.2	9.1	9.8	9.8	9.6	9.7	9.9	10.4	10.5	9.7
						1983							
Labor Force	109779	109647	109873	109875	110308	113383	113980						
Emp.	97262	97265	97994	98840	99543	101813	102273						
Unemp.	12517	12382	11879	11035	10765	11570	10707						
Unemp. Rt.	11.4	11.3	10.8	10.0	9.8	10.2	9.4						

(excluding 1975 for Manufacturing) since 1948. Further, poor condition in Agriculture and Mining contributed heavily to the deterioration in the State's economy in 1982.

As 1983 opened, employment fell short of 1982 levels by some 45,500 persons, and there were 26,100 more unemployed, a 21.2 percent increase in unemployment over January 1982. Although the recession ended in November of 1982, the recovery was rather flat in the first quarter of 1983. Unemployment was still high and after seasonal factors were removed, showed continued deterioration.

By April there still were 28,600 fewer employed than a year ago, and 5,800 more jobless workers, but by May the number of unemployed had fallen 3,400 below the level in May of 1982. Employment, however, stil trailed the 1982 level by 26,500 (See Table 10, and Chart 2).

Unemployment has been shrinking relatively faster than the growth in employment because workers are not anxious to remain in or enter the labor force when they believe there is no hope of work. In examining the size of the labor force since 1980, we see that by 1981 when the recession began, it had contracted by 12,500 persons, and it lost another 24,400 in 1982, for a net decrease of nearly 37,000 workers over the two-year period. During the same two years the number of people aged 16 and over increased by 98,200, so we have real evidence of just how severe an impact the recession had on the labor force in Minnesota.

The few bright spots during the first quarter of 1983 occurred wehn housing permits more than doubled and Retail Sales jumped by 12 percent between July 1981 and July 1982. The major reason employment is not growing appreciably is that despite over-the-year gains in Construction, Mining, Trade, and Health Services, the Manufacturing industry is showing continued sluggishness. Expectations are that it will improve in the latter half of 1983 or early 1984. The Mining industry, on the other hand, will not likely fully recover in the next year, if at all.

Future improvement in Minnesota's labor market conditions is largely linked to national economic conditions. As with the Nation, the moderation in interest rates is expected to generate increased residential and commercial construction activity. Also, the fact that the Manufacturing sector is closely linked to regional and national markets, strongly suggests that once the recovery really takes hold, this large industry will begin to show steady improvement. This may be especially true for Ordnance, Nonelectrical Machinery, and Electrical Machinery, all of which have fairly strong linkages with defense expenditures which, in turn, are likely to reflect the development of new weapons systems.

Table 9 details the State's employment by industry which allows one to trace the changes that have occurred between 1975 and 1982. Table 10 shows labor force data, by month, from January 1978 through June 1983 (the most current month for which data was available at time of publication). Chart 2 compares the employment and unemployment rates, by month, for the years 1981, 1982, and the first half of 1983 to provide a more concise summary of labor force developments that have occurred since the recession took hold.

Table 9

Minnesota Employment By Industry, 1975 Through 1982
(In Thousands)

INDUSTRY	1975	1976	1977	1978	1979	1980	1981	1982	% Δ 81-82
Nonagricultural Wage and Salary	1474.4	1520.9	1597.3	1688.9	1767.0	1771.0	1762.7	1708.7	- 3.1
Manufacturing	313.0	321.7	339.3	360.4	381.6	371.2	364.0	346.3	- 4.9
Durables	180.1	185.7	199.2	216.3	234.0	225.7	219.6	206.0	- 6.2
Lumber & Furniture	12.3	13.6	14.9	16.6	16.9	14.7	14.4	13.0	- 9.7
Stone, Clay & Glass	8.6	8.6	9.2	9.9	10.0	9.2	8.8	8.1	- 8.0
Primary Metals	5.4	5.6	6.3	7.0	7.6	6.8	6.2	5.5	-11.3
Fabricated Metals	31.3	30.9	32.9	35.5	39.0	37.6	35.8	33.4	- 6.7
Nonelectrical Machinery	64.7	66.0	69.6	77.8	87.1	87.7	86.8	81.5	- 6.1
Electrical Machinery	22.1	23.3	25.8	26.9	28.1	27.0	26.8	26.2	- 2.2
Transportation Equipment	10.2	10.3	11.1	11.0	11.0	7.9	6.2	5.7	- 8.1
Scientific Instruments & Misc.	25.5	27.3	29.4	31.6	34.3	35.0	34.5	32.6	- 5.5
Nondurables	132.9	136.0	140.1	144.1	147.6	145.5	144.4	140.3	- 2.8
Food	47.9	48.9	49.9	50.2	49.4	48.8	47.7	46.9	- 1.7
Textiles & Apparel	10.1	10.1	10.1	10.0	9.0	8.3	7.6	5.0	-34.2
Paper	30.6	30.5	31.0	31.6	33.4	32.6	32.5	32.4	- 0.3
Printing & Publishing	26.3	26.9	28.9	31.1	33.1	33.5	34.7	35.4	2.0
Chemicals & Petroleum	7.8	7.8	8.1	8.4	8.8	9.1	9.4	9.2	- 2.1
Rubber, Misc. Plastics & Leather	10.2	11.7	12.1	12.7	13.9	13.1	12.5	11.4	- 8.8
Nonmanufacturing	1161.4	1199.2	1258.0	3128.5	1385.4	1399.8	1398.8	1362.4	- 2.6
Mining & Quarrying	14.3	15.0	12.9	16.4	17.3	15.6	15.6	9.5	-39.1
Construction	63.6	65.4	68.7	79.0	83.2	76.5	67.7	59.7	-11.8
Transportation	58.4	58.7	60.6	61.1	66.3	65.4	64.3	60.8	- 5.4
Railroads	15.8	15.6	15.3	15.7	15.9	15.9	15.6	13.7	-12.2
Trucking	22.3	22.8	23.8	25.1	26.6	24.8	24.2	23.2	- 4.1
Communications & Public Utilities	30.7	31.1	31.9	32.8	34.1	34.5	34.5	34.0	- 1.4
Wholesale Trade	104.5	106.2	107.9	113.8	118.6	116.8	116.2	113.1	- 2.7
Retail Trade	265.4	277.3	295.6	313.1	324.5	326.0	323.7	317.8	- 1.8
Building Materials & Hardware	17.2	17.7	18.8	19.9	20.0	18.8	18.2	17.1	- 6.0
General Merchandise	44.0	44.6	46.0	47.3	48.0	48.4	46.3	45.4	- 1.9
Food	36.5	38.5	39.6	41.2	43.7	45.9	46.2	44.8	- 3.0
Automotive	35.3	76.5	38.0	39.6	39.8	36.5	34.8	33.8	- 2.9
Apparel	14.1	14.6	15.4	16.2	16.4	16.3	16.5	16.0	- 3.0
Furniture	8.9	9.7	10.8	12.1	12.7	12.4	11.6	11.1	- 4.3
Eating & Drinking	76.5	71.5	90.6	98.3	103.7	106.2	106.6	105.7	- 0.8
Miscellaneous	32.8	34.1	36.4	38.5	40.3	41.5	43.5	43.8	0.7
Finance, Insurance & Real Estate	75.4	77.9	82.2	86.3	91.4	94.8	97.8	98.2	0.6
Services	277.8	291.5	312.0	333.3	354.4	369.7	379.9	380.6	0.2
Business	32.4	35.1	40.4	46.3	52.1	55.9	55.4	56.1	1.3
Medical	96.0	100.5	106.8	111.7	117.6	124.8	130.1	132.2	1.6
Government	271.4	276.0	286.3	292.8	295.6	300.6	299.1	288.8	-3.4
Federal	31.1	30.6	30.6	31.4	31.3	32.6	31.2	30.3	- 2.9
State	61.8	63.4	66.9	68.4	69.9	72.0	72.0	70.6	- 1.9
Administrative	21.6	22.0	23.4	23.8	23.9	24.2	23.5	22.9	- 2.6
Hospitals	9.5	9.7	10.4	10.6	10.4	10.7	10.3	10.2	- 0.7
Education	30.7	31.8	33.0	34.0	35.6	37.1	38.2	37.5	- 1.8
Local	178.5	182.0	188.9	193.0	194.4	196.0	195.8	187.9	- 4.0
Administration	63.2	64.2	68.0	70.4	70.7	71.7	72.2	69.9	- 3.2
Hospitals	15.6	16.7	17.7	18.5	189.6	195.7	200.6	199.9	- 0.3
Education	99.6	101.1	103.3	104.1	104.7	104.7	103.5	98.0	- 4.3
All Other Nonag.	151.2	162.4	162.5	169.2	173.3	170.1	169.1	174.6	3.3
Agricultural	131.0	139.6	129.3	120.6	124.5	123.3	122.2	121.1	- 0.9

Source: Current Employment Survey (CES) Programs

Table 10

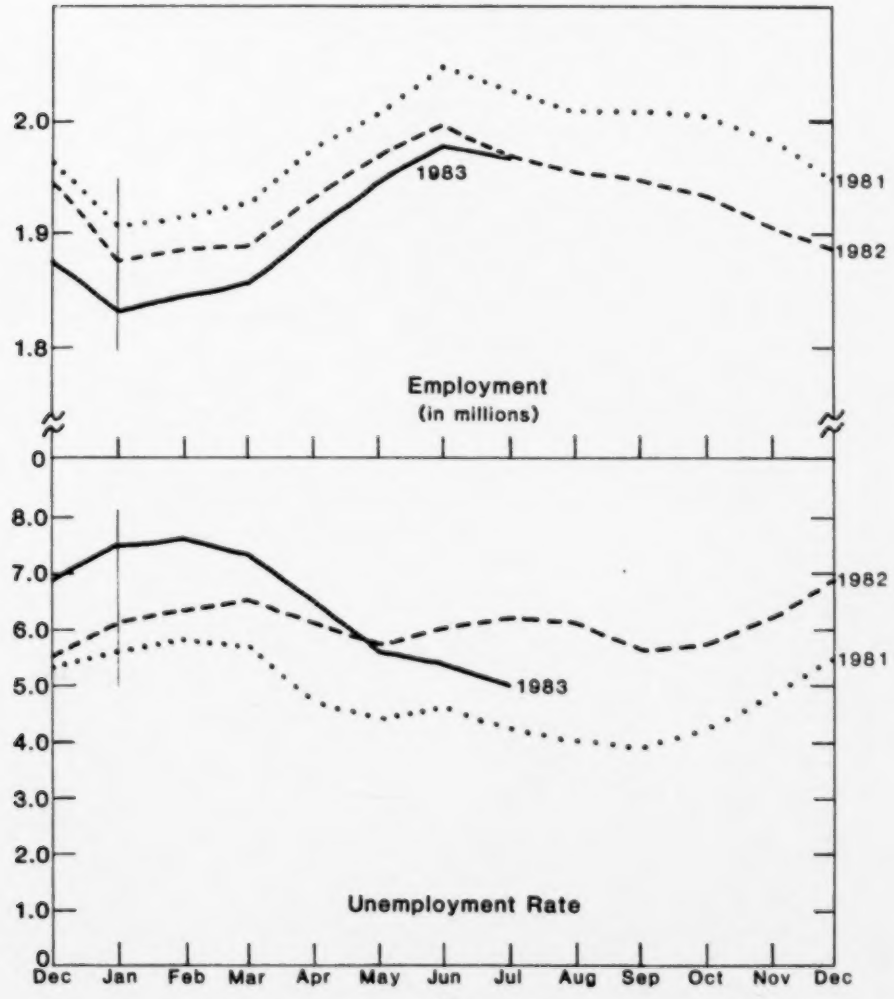
Minnesota Handbook Labor Froce Data

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	A.A.
1978													
Labor Force	1895.4	1895.7	1903.4	1940.2	1985.6	2048.1	2054.5	2031.1	2019.9	2012.8	2009.7	2003.4	1983.3
Employment	1788.0	1794.9	1809.8	1860.6	1909.9	1963.1	1975.5	1961.5	1957.7	1953.5	1935.8	1919.6	1902.5
Unemployment	107.4	100.8	93.5	79.7	75.7	85.1	79.0	69.6	62.2	59.2	73.9	83.8	80.8
Unemp. Rate	5.7	5.3	4.9	4.1	3.8	4.2	3.8	3.4	3.1	2.9	3.7	4.2	4.1
1979													
Labor Force	1969.7	1979.7	1993.0	2035.3	2081.9	2140.0	2122.4	2110.1	2087.4	2089.2	2083.7	2071.1	2063.6
Employment	1874.4	1890.1	1906.3	1955.4	2012.2	2061.7	2051.6	2037.2	2027.4	2026.2	2005.4	1976.5	1985.3
Unemployment	95.3	89.6	86.6	79.9	69.7	78.3	70.8	72.9	60.0	63.0	78.3	94.6	78.3
Unemp. Rate	4.8	4.5	4.3	3.9	3.3	3.7	3.3	3.5	2.9	3.0	3.8	4.6	3.8
1980													
Labor Force	2023.0	2035.3	2050.1	2108.0	2119.4	2154.2	2127.8	2105.1	2105.8	2093.0	2080.2	2070.5	2089.4
Employment	1920.7	1933.6	1944.2	2000.7	2019.0	2040.4	2023.3	2010.8	2012.3	2004.9	1985.1	1961.2	1988.0
Unemployment	102.3	101.7	105.9	107.3	100.4	113.8	104.5	94.3	93.5	88.1	95.1	109.3	101.4
Unemp. Rate	5.1	5.0	5.2	5.1	4.7	5.3	4.9	4.5	4.4	4.2	4.6	5.3	4.9
1981													
Labor Force	2017.3	2030.0	2038.4	2070.9	2099.0	2146.2	2117.5	2093.0	2089.8	2091.3	2069.7	2060.2	2076.9
Employment	1903.6	1912.7	1923.2	1974.5	2005.9	2046.4	2028.6	2009.6	2008.1	2064.0	1971.4	1947.7	1978.0
Unemployment	113.7	117.3	115.2	96.4	93.1	99.8	89.0	83.4	81.6	87.3	98.3	112.4	99.0
Unemp. Rate	5.6	5.8	5.7	4.7	4.4	4.6	4.2	4.0	3.9	4.2	4.8	5.5	4.8
1982													
Labor Force	1998.5	2012.5	2020.3	2054.5	2087.7	2120.5	2099.1	2079.4	2063.6	2048.9	2031.5	2013.1	2052.5
Employment	1875.6	1884.9	1888.7	1929.2	1968.3	1992.7	1969.2	1952.5	1947.1	1932.8	1905.6	1875.0	1926.8
Unemployment	122.9	127.6	131.6	125.3	119.4	127.8	129.9	126.9	116.4	116.2	126.0	138.1	125.7
Unemp. Rate	6.1	6.3	6.5	6.1	5.7	6.0	6.2	6.1	5.6	5.7	6.2	6.9	6.1
1983													
Labor Force	1979.1	1992.3	1996.4	2029.0	2058.2	2093.0	2071.0						
Employment	1830.1	1841.8	1850.5	1897.2	1942.2	1980.7	1967.4						
Unemployment	149.0	150.5	146.0	131.9	116.1	113.2	103.6						
Unemp. Rate	7.5	7.6	7.3	6.5	5.6	5.4	5.0						

Table 13 shows the number and proportion of male to female U.I. claimants from 1970 to 1982. Notice that although the proportion of women in the labor force has increased dramatically since 1970, the proportion of women drawing U.I. benefits has not, even during the last recession. One reason is that women are more often employed in the Service, Clerical, and Sales occupations which are less affected by economic downturns. Men, who are predominantly found in the Construction, Mining, Machine Trades, and to a lesser degree Manufacturing occupations, are generally the first to lose their jobs.

Chart 2

Minnesota Employment and Unemployment Rates* By Month: 1981, 1982 and 1983



* Handbook Method

Income And Poverty

Both Table 11, which reflects per capita personal income, and Table 12, which contains data on family income derived from income tax forms, indicates that when adjusted for inflation, real incomes have fallen between 1979 and 1982. This was true both nationally and statewide.

Per capita personal income reflects earnings from all people, including those not in the labor force and those unemployed. Median family income in Table 12 is based upon those families who earned enough to file a tax form.

Minnesota capita personal income averaged $11,082 in 1982 compared with $3,893 in 1970. After inflation took its bite, that $11,082 bought only as much or $4,259 did in 1970, an increase of 9.4 percent in buying power. In 1979 per capita personal income for Minnesotans had been up by 20.5 percent over 1970. Thus, the gain in purchasing power made by 1979 was more than cut in half by 1982.

The rest of the country, on average, fared better. Although actual incomes are generally slightly lower nationally, purchasing power was 12.9 percent higher in 1982 than it was in 1970, but down from 17 percent higher in 1979.

The median money income of Minnesota families was $23,230 in 1981. Tha is 16.4 percent more than the $19,959 reported for 1979. But that increase did not keep pace with inflation which went up by 24.7 percent over the same period. Moreover, with rising unemployment due to a deepening recession during 1981, changes in filing requirements affecting low income tax

Table 11

Comparison of Per Capita Personal Income Increases: MN and U.S.

Year	MN 1/	% Increases From 1970	Real % Increases 2/	U.S. 1/	% Increases From 1970	Real Increases 3/
1970	$ 3893	00.0	----	$ 3945	00.0	----
1971	4086	5.0	1.3	4167	5.6	1.3
1972	4434	13.9	6.8	4515	14.1	6.1
1973	5243	34.7	18.9	5010	27.0	11.1
1974	5534	42.2	12.6	5448	38.1	8.8
1975	5878	51.0	10.3	5842	48.1	6.8
1976	6322	62.4	11.7	6367	61.4	10.1
1977	7141	83.4	17.8	6971	76.7	13.2
1978	7920	103.4	19.7	7729	95.9	16.7
1979	8925	129.3	20.5	8638	119.0	17.0
1980	9765	150.8	18.3	9511	141.1	13.5
1981	10,768	176.6	16.5	10,491	165.9	13.6
1982	11,082	184.7	9.4	11,056	180.3	12.9

Source: 1/ The U.S. Department of Commerce, Bureau of Economic Analysis for per capita income.

2/ Adjusted for the M-SP CPI-W

3/ Adjusted for the U.S. CPI-W

payers, as well as fewer taxpayers because of rising unemployment, even the 16.4 percent increase in income may be an overstatement.

Within the State, the highest 1981 median family incomes were found in counties surrounding Minneapolis and St. Paul, Olmsted County

Table 12

1979 Income Levels

Minneapolis Contrasted With Mpls-St Paul and The U.S.

	MINNESOTA	MPLS-ST PAUL	UNITED STATES
Household Income			
Median	$ 17,761	$ 20,722	$ 16,830
Average	$ 20,726	$ 23,712	$ 20,373
Family Income			
Median	$ 21,185	$ 27,144	$ 19,908
Average	$ 23,939	$ 27,702	$ 23,177
Unrelated Individuals 15+			
Median	$ 6,867	$ 8,656	$ 6,714
Average	$ 9,058	$ 10,511	$ 9,317

Persons by 1979 Poverty Status & Age	Number	Percent Distribution	Number	Percent Distribution	Number	Percent Distribution
Above Poverty Level	3,585,652	90.5 of total	2,185,880	94.1 of total	193;463,027	87.6 of total
Under 55	2,883,864	80.4 of above	1,567,180	71.7 of above	153,272,047	79.2 of above
55-59	174,994	4.9 of above	87,564	4.0 of above	10,607,788	5.5 of above
60-64	154,177	4.3 of above	70,210	3.2 of above	9,009,801	4.7 of above
65+	372,617	10.4 of above	460,926	21.1 of above	20,573,391	10.6 of above
Below Poverty Level	374,956	9.5 of total	136,750	5.9 of total	27,382,739	12.4 of total
Under 55	284,635	75.9 of below	110,240	80.6 of total	21,805,891	79.6 of total
55-59	12,021	3.2 of below	3,715	2.7 of total	962,044	3.5 of total
60-64	13,736	3.7 of below	4,287	3.1 of total	1,033,831	3.8 of total
65+	64,564	17.2 of below	18,508	13.5 of total	3,580,973	13.1 of total

Source: Census of Population, Dept. of Commerce

(Rochester), St. Louis, and Lake Counties. The reported increase in median incomes in northeast Minnesota may, ironicaly, be an anomaly due to the 1977 labor disputes in the taconite industry and the mining plant closings and slowdowns that took place during 1981. They eliminated some of the tax filers in lower income levels. Truncating the lower end of the income distribution pushes the median up.

Washington and Dakota Counties, with respective median incomes of $29,262 and $29,215 in 1981, ranked highest in the state. Both exceeded the state average by more than 25 percent. These two counties have ranked first and second in median income since the early 1970s. Of the counties within the Minneapolis-St. Paul metropolitan area, only Hennepin, Ramsey, and Washington reported percentage increases in 1981 income greater than the state-wide rate of change.

The 1980 Census suggests that nearly 10 percent of the families with one or more related children were living on incomes below the poverty level in 1979. Families with children under age five were poorer, with 12.7 percent below poverty, than families with children aged five or older, with 7.1 percent below poverty. By way of comparison, only 4.7 percent of the families without children had money income below the poverty level in 1979.

When the head of the family was female with no husband present, the incidence of poverty was much greater, about 50 percent when there were children under age six present, and nearly 21 percent when all the children were at least six years of age. One would expect that women with the youngest children would, on average, be younger themselves and with less work experience and, therefore, less earning power. Another major factor is that younger children require more care, are not in school, and inhibit the mother from pursuing the better paying jobs.

Unrelated individuals, especially those 65 years of age and older, experienced a higher incidence of poverty than did families. Twenty-three percent of all unrelated individuals reported money incomes below the poverty level in 1979, and if they were over 65, the rate rose to 29 percent.

Racially, whites experienced the least pverty, which stood at about nine percent in 1979. Thirty percent of the American Indians, at the other end of the specturum, reported living on poverty incomes, but given the propensity of Indians to ignor filling out Census questionnaires, the true figure is likely to be much higher, perhaps in the neighborhood of 40-50 percent.

Compared with the reported 30 percent incidence of poverty among Indians during 1979, was the 26½ percent figure for blacks. Blacks, especially the poorer ones, are also known to be undercounted in the Census. The 26½ percent, while probably a better measure than the 30 percent for Indians, also underrepresents the severity of the problem.

Table 11 provides a comparison of how per capita personal income actually behaved between 1970 and 1982, and what the real increases were after the effects of inflation were taken into account for both the State and Nation.

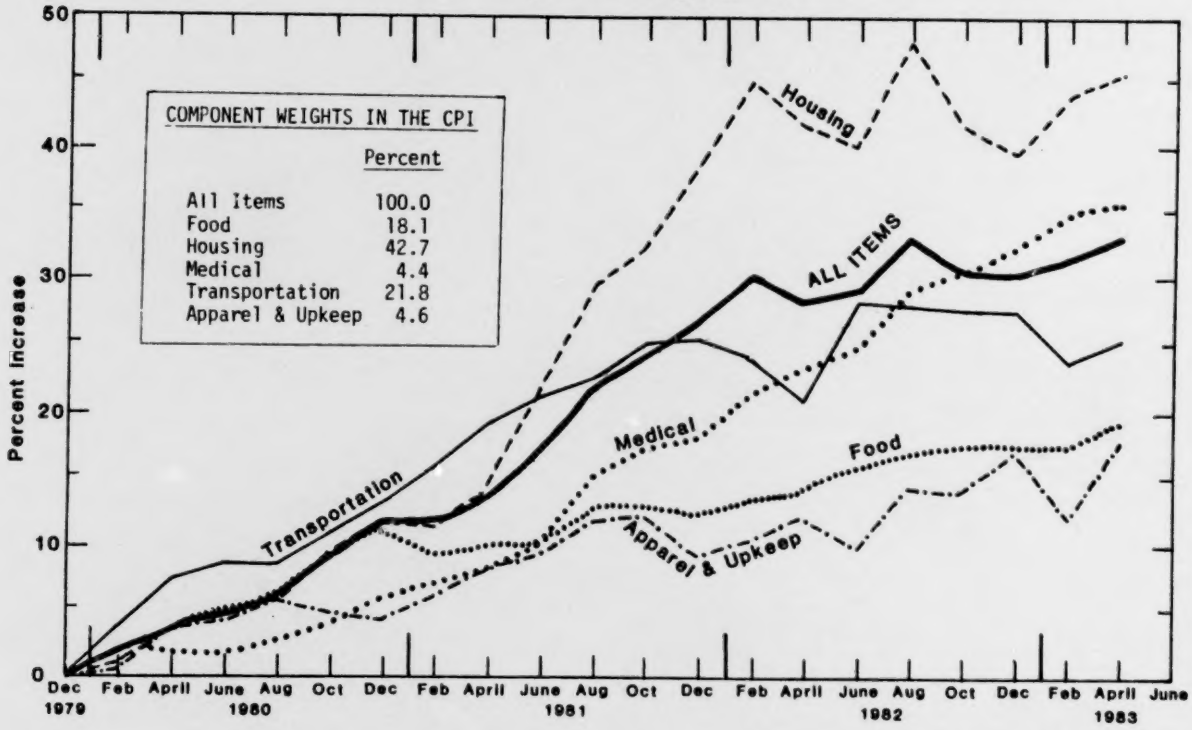
Table 12 shows 1979 income levels

for various groups in the State, the Minneapolis-St. Paul area, and the Nation.

Chart 3 shows changes in the prices of major components of the Consumer Price Index in Minneapolis-St. Paul area between December, 1979 and June, 1983.

Chart 3

Percent Change in the Consumer Price Index Since Dec. 1979 By Major Component



Source: CPI-W for Mpls-St.Paul provided by the U.S. Bureau of Labor Statistics

Unemployment

Following the relatively modest unemployment rates* of 4.1 percent in 1978 and 3.8 in 1979, unemployment hovered just below five percent in 1980 and 1981 before rising to 6.1 percent in 1982, and then climbing to an annually projected rate of 7.1 percent for the first four months of 1983. Finally, in May of 1983, it dropped dramatically to 5.6 percent, 0.1 percentage points below May of 1982, and appeared destined for futher declines into Fall, 1983.

* Handbook Method Series, CPS unadjusted.

To some extent, the unemployment rate is an outmoded measure of economic distress because it is often partially mitigated by unemployment insurance, food stamps, and the likelihood of income from other family members, the incidence of which has risen sharply in the last several years. Additionally, because on average, about 50 percent of the nonagricultural workers (including 95 percent of all wage and salary workers) could receive money through unemployment insurance if unemployed, it has been argued that job search is weakened. It might even be argued that U.I. subsidized some people to be idle.

With today's income maintenance cushions, unless jobs are extremely scarce, unemployed workers do not just take the first offer that comes along. Conversely, when few if any job offers are available, as often as happens during a recession as severe as the last one, it takes a long time to find work. Either way, long periods of job hunting or waiting for the best offer drives up the unemployment rate.

That the duration of unemployment increases as the job market contracts, is evident when looking at the number of workers who remain unemployed 15 weeks or longer. In 1981 when unemployment rate stood at 4.8 percent, 70,047 or 31.8 percent of those unemployed were considered "long term". When the unemployment rate jumped to 6.1 percent in 1982, 38.8 percent or some 103,899 had been jobless for 15 or more weeks. (See tables 18 through 21).

As the recession widened in 1982, it drove the unemployment insurance claims up by 21.7 percent over the 1981 level. Females were slightly more apt to have lost their jobs in 1982 (claims were up by 28.6 perent), but minorities were, if

Table 13

Average Weekly Insured
Unemployment, Minnesota 1970-82

YEAR	TOTAL	MALE	%	FEMALE	%
1970	25,217	16,532	65.6	8,685	34.3
1971	33,131	22,518	68.0	10,614	32.0
1972	32,041	22,488	70.2	9,553	29.8
1973	29,975	20,249	67.6	9,725	32.4
1974	37,543	25,525	68.0	12,017	32.0
1975	60,015	39,781	66.2	20,233	33.7
1976	50,165	32,483	64.8	17,682	35.2
1977	42,110	27,555	65.4	14,555	34.6
1978	30,750	20,697	67.3	10,054	32.7
1979	31,471	22,225	70.6	9,246	29.4
1980	51,229	37,579	67.0	13,650	33.0
1981	47,706	34,713	71.9	13,592	28.1
1982	68,738	49,118	71.5	19,620	28.5

anything, slightly less apt to establish benefit claims (their claims were up by 20.6 percent). Among those aged 21 or younger, the number of claims actually dropped by 4.2 percent. This may have been, in part, because the young, having fewer wage credits, exhausted their benefits sooner than many older workers who were laid off in 1981 and were able to draw benefits into 1982. The major jumps in claims for minorities occurred in the Service sector, and for the young employed in Farm, Forestry, Fisheries, Services and Processing industries.

According to U.I. data, the Construction industry was the largest source of unemployment in 1981, accounting for nearly one quarter of the claims. The Durable Goods Manufacturing sector, which normally employs about three times the number of workers as Construction, generated 20.2 percent of the claims. When the Construction industry began to recover in the latter part of 1982, a reversal of claims activity took place with Construction's share of the claims dropping to 20 percent, while the Durable Goods Manufacturing sector's claim load rose to 23.3 percent. Over the 1981-82 period, claims for those in Mining occupations doubled. Underlining the severity of the problem was the nearly eight-fold jump in the number of long term unemployed in the Mining industry.

Employment Forecast For 1984

The previous assessment of demographics and the economy served as the basis for the projections provided in Tables 14 through 16 which describe various aspects of the State's 1984 population by age group and sex, as well as the likelihood of those aged 16 and older to seek and find work.

For these analyses, as for discussions of the labor force in this publication, we are using what is known as the "Handbook" labor force series. These estimates are produced using a standard methodology which yields, for each month (and an annual average), an estimate of the number of people working and the number unemployed. From these two figures the labor force (employment plus unemployment) and the unemployment rate (labor force divided by unemployment) are calculated.

However, these figures are not "official" until adjusted to coincide with the State's share of the national Current Population Survey (CPS). Alignment with the CPS, although providing the somewhat dubious distinction of officiality, also introduces considerable random sampling error because of the relatively small size of Minnesota's share of the national sample (about 1300 households in Minnesota). Large sampling errors often produce unmeasurable breaks in the data and reduce comparability over time. Therefore, it is difficult to say how much of the change, especially from year to year, in the official CPS adjusted serires is real, and how much is random sampling error.

Table 14

Minnesota Population [1/], Labor Force [2/], and Participation Rates [3/]
1974 to 1984

Year	Total Population	Population 16+	Ratio 16+ pop to Total	Labor Force	Employ-ment	Participation Rate	U.S. Part. Rate
1974	3897.5	2759.7	.708	1796.1	1699.5	65.1	61.7
1975	3921.0	2798.6	.714	1819.1	1691.0	65.1	61.6
1976	3958.0	2856.0	.722	1864.1	1744.2	65.3	62.0
1977	3983.9	2899.8	.728	1923.9	1819.1	66.5	62.6
1978	4014.6	2954.6	.736	1983.3	1902.5	67.1	63.5
1979	4047.6	3009.9	.744	2063.6	1985.3	68.6	64.0
1980	4076.0	3064.1	.752	2089.4	1988.0	68.2	64.1
1981	4106.2	3095.2	.754	2076.9	1978.0	67.1	64.2
1982	4136.5	3162.3	.756	2052.5	1926.8	65.7	64.3
1983*	4166.7	3157.3	.758	2075.0	1960.0	65.7	INA
1984*	4196.9	3188.4	.760	2128.0	2028.0	66.7	INA

1/ Source: Census, State Demographer projection for 1985 and interpolation

2/ Source: MDES Handbook Method (Not CPS adjusted)

3/ Source: State and National CPS series

* Projected

Table 15

Minnesota Labor Force - Annual Averages

Year	Labor Force	Employment	Unemp.	Unemp. Rt.	Percent Change from pre. Year		
					L. F.	Emp.	Unemp.
1978	1983.3	1902.5	80.8	4.1	-----	-----	-----
1979	2063.6	1985.3	78.3	3.8	4.0	4.4	- 3.1
1980	2089.4	1988.0	101.4	4.9	1.3	0.1	29.5
1981	2076.9	1978.0	99.0	4.8	- 0.6	- 0.5	- 2.4
1982	2052.5	1926.8	125.7	6.1	- 1.2	- 2.6	27.0
1983*	2075.0	1960.0	115.0	5.5	1.1	1.7	- 8.5
1984*	2128.0	2028.0	100.0	4.7	2.6	3.5	-13.0

One cannot say, conversely, that the Handbook figures are accurate either, but comparisons over time suggest that they track better with labor market conditions, especially seasonal fluctuations. Hence, their use in this publication. The official labor force series from 1978 through June of 1983 appears in the Appendix for those who wish to make comparisons with the Handbook estimates.

Table 14 compares population with labor force data from 1974 to show the trend in the willingness of those aged 16 and older to participate in the labor force. It also shows that, until 1981, the percentage of those 16 and older who entered the labor force (called the participation rate) grew each year until dropping between 1981 and 1982, and is then expected to begin increasing in 1984.

Table 15 links population estimates for those aged 16 and over with estimates of the labor force for years 1978 and 1984 to say something about the changes that have occurred or are expected to occur from year to year.

Table 16 estimates how 1984's projected labor force will be distributed by age group and by sex.

Table 16

Projected 1984 Population, Labor Force 1/, Participation Rate & Unemployment Rate by Age Group and Sex for Minnesota

	16+	16-19	20-24	25-34	35-44	45-54	55-64	65+
Total Male and Female (In Thousands)								
Population	3188.4	280.7	394.0	732.9	533.5	380.2	361.2	505.8
Labor Force	2128.0	185.9	323.0	606.4	442.3	304.6	205.3	60.5
Participation Rt.	66.7	66.2	82.0	82.7	82.9	80.1	56.8	12.0
Employment	2028.0	169.7	302.9	573.3	426.6	297.1	198.8	59.6
Unemployment	100.0	16.2	20.1	33.1	15.7	7.5	6.5	0.9
Unemp. Rt.	4.7	8.7	6.2	5.5	3.5	2.5	3.2	1.5
Male								
Population	1541.7	142.5	198.1	365.9	266.7	188.4	174.2	205.9
Labor Force	1184.7	94.8	172.7	338.2	246.3	175.4	120.8	36.5
Participation Rt.	76.8	66.5	87.2	92.4	92.4	93.1	69.3	17.7
Employment	1126.3	87.0	159.3	320.3	236.2	170.4	117.1	36.0
Unemployment	58.4	7.8	13.4	17.9	10.1	5.0	3.7	0.5
Unemp. Rt.	4.9	8.2	7.8	5.3	4.1	2.9	3.1	1.4
Female								
Population	1646.7	138.3	196.0	367.0	266.8	191.8	187.0	299.9
Labor Force	943.3	91.1	150.3	268.2	196.0	129.2	84.5	24.0
Participation Rt.	57.3	65.9	76.7	73.1	73.5	67.4	45.2	8.0
Employment	901.7	82.7	143.6	253.0	190.4	126.7	81.7	23.6
Unemployment	41.6	8.4	6.7	15.2	5.6	2.5	2.8	0.4
Unemp. Rt.	4.4	9.2	4.5	5.7	2.9	1.9	3.3	1.7

1/ Handbook Series (Not CPS adjusted)

II. LABOR DEMAND AND SUPPLY CONDITIONS

Worker Demand

This section briefly examines the recent demand for workers, especially for the kinds of occupations the State's employers have been recruiting through the Employment Service over the past year. Projections by occupation are beyond the scope of this publication, but can be found in the Occupational Outlook Handbook, the Review of Labor and Economic Conditions, Employment Projections, 1985 and the Encyclopedia of Careers and Vocational Guidance.

During the 1981-82 recession, the demand for workers fell disastrously, as any job seeker can relate. Labor force statistics tell us that during the first four months of 1983 there were, on average, 73,600 fewer persons employed in the State than just two years previously. The number of jobless workers jumped by 33,700 over those same two years. Many more never showed up among the unemployed because they either left the labor force voluntarily, or much more likely, dropped their job search because they believed there were no jobs available. Many graduating students and others who normally would have entered the labor force did not do so because they considered it futile. The only occupations for which employers were hiring with any frequency during 1982 were for experienced computer programmers and systems analysts, experienced engineers, commissioned sales people, and highly skilled clerical workers. Few applicants met these qualifications.

The Job Services is not a representative source of job orders. Although this department gets job orders from employers, and many job seekers use it in their job search, there are many on both sides who do not. Most employers, in fact, do not recruit through the Job Service, relying mainly upon direct applications and other intermediaries. Specifically, small employers rarely use the J.S., and the large companies that do, often recruit only for selected professional, technical, managerial, sales or clerical positions. Mostly, they list their service, machine trade, and benchwork jobs.

Except for farmers and farm workers, the demand for most occupations should improve as the economy continues to expand. Although the Mining industry will not, as previously mentioned, nourish the economy of northeast Minnesota as it once did, occupations associated with Construction and Manufactur-

ing, in particlar, should be more in demand as these two industries rebound from the recovery trough.

Current occupational projections indicate that by 1985 nearly 50 percent of the workers will be found within one of three categories: Clerical, Professional, Technical, and Kindered, and Services. Clerical jobs are projected to grow the fastest between 1978 and 1985, while the increase in Service jobs should closely follow.

If the labor force projections in Table 15 materialize, there will be 33,200 more people working in 1983 than there were in 1982, and another 68,000 in 1984. Conversely, there should be 25,700 fewer unemployed in 1984 than during 1982.

Table 17 shows the relationship between applicants available, openings received from employers, and placements for those using the Job Service. Total placements differ from individuals placed to the extent that applicants were placed in more than one job during the period from October 1, 1982 to June 30, 1983. The column titled "% of Apps Placed" summarizes the relative frequency with which applicants in various occupational categories were placed in jobs. Since it was calculated by dividing individuals placed into total applicants available, it is not distorted by the same applicant being placed in several short-term jobs.

The ratio of applicants to openings roughly gages the competition those applicants have faced in securing

Table 17

Minnesota Job Service Applicants, Openings, and Placements
October 1, 1982 Through June 30, 1983

Occupation	Total Apps. Available	Openings Received	Placements exc. Misc	Total Individuals Placed	% of Apps Placed	Ratio of Apps. to Openings
Total	361,806	69,672	50,624	35,337	9.8	5.2:1
Prof.,Tech.,Mgr.	44,989	3,905	1,128	1,069	2.4	11.5:1
Clerical & Sales	76,130	17,271	9,505	8,683	11.4	4.4:1
Clerical	59,275	12,601	7,395	6,637	11.2	4.7:1
Sales	16,855	4,670	2,110	2,046	12.1	3.6:1
Service	52,224	12,858	9,050	7,608	14.6	4.1:1
Domestics	5,089	3,358	2,976	1,971	38.7	1.5:1
Other	47,135	9,500	6,074	5,637	12.1	5.0:1
Farm, Fish, For.	15,191	4,717	4,074	3,425	22.5	3.2:1
Processing	8,667	2,634	2,600	2,540	29.3	3.3:1
Machine	22,101	1,971	1,181	1,102	5.0	11.2:1
Bench Work	22,003	1,675	1,095	1,007	4.6	13.1:1
Structural	46,769	4,618	3,869	3,023	6.5	10.1:1
Miscellaneous	54,957	20,023	18,122	9,763	17.8	2.7:1
Motor Trans.	14,330	1,566	1,046	970	6.8	9.2:1
Package & Mat.Hand.	36,528	17,772	16,664	8,469	23.2	2.1:1
Other	4,099	685	412	324	7.9	6.0:1

Source: ESARS Tables A07 and 09

work. Generally speaking, the greater the number of ratio of applicants for each opening, the greater the competition.

If one compares these ratios to those of a year or two previous, it is apparent that the percentage of applicants placed has dropped during 1982-83, and that the ratio of applicants to openings has risen. Placements dropped particularly among professionals, technicals, managerials, machine trades, and benchwork, but not much for service, farm, forestry, or fishery occupations.

Worker Supply

Information on job seekers is sketchy; they appear among the unemployed, students and graduates, displaced homemakers, migrants and job changers, to name a few. Often they fit more than one category, and most qualify to work in several different occupations.

Table 22 summarizes the characteristics of all Job Service applicants in FY 1982 who were experienced, and those just entering the labor market. Table 23 provides the same information for women only. Table 24 breaks down all applicants into various categories according to education by age and veteran status, while Table 25 does the same for women only.

Table 18

MINNESOTA DEPARTMENT OF ECONOMIC SECURITY
CHARACTERISTICS OF INSURED UNEMPLOYED, CALENDAR YEAR 1981
BY INDUSTRY ATTACHMENT

MINNESOTA STATE TOTAL

CHARACTERISTICS	TOTAL	PRIMARY OCCUPATIONAL CATEGORY										
		PROF., TECH., MGR'L.	CLERICAL	SALES	SERVICE	FARM, FISH., FORESTRY	PROCESS	MACHINE TRADES	BENCH WORK	STRUCT. WORK	MISC.	INA
TOTAL	220,100	21,031	20,093	6,914	15,119	3,399	10,832	15,605	23,577	63,533	39,388	609
P	100.0	9.6	9.1	3.1	6.9	1.5	4.9	7.1	10.7	28.9	17.9	.3
FEMALE	62,866	8,485	16,095	2,436	8,990	559	4,824	2,422	12,861	1,597	4,396	201
P	100.0	13.5	25.6	3.9	14.3	.9	7.7	3.9	20.5	2.5	7.0	.3
MINORITIES	7,357	991	819	132	1,066	106	416	539	937	1,178	1,142	31
P	100.0	13.5	11.1	1.8	14.5	1.4	5.7	7.3	12.7	16.0	15.5	.4
AGE												
21 OR YOUNGER	32,882	879	3,266	949	3,018	799	1,879	2,406	4,183	8,956	6,451	96
P	100.0	2.7	9.9	2.9	9.2	2.4	5.7	7.3	12.7	27.2	19.6	.3
22 - 54	168,329	18,843	15,306	5,283	10,215	2,207	7,445	11,987	17,236	49,386	29,964	457
P	100.0	11.2	9.1	3.1	6.1	1.3	4.4	7.1	10.2	29.3	17.8	.3
55 - 64	17,526	1,227	1,398	615	1,664	350	1,307	1,156	2,028	4,939	2,791	51
P	100.0	7.0	8.0	3.5	9.5	2.0	7.5	6.6	11.6	28.2	15.9	.3
65 OR OLDER	1,363	82	123	67	222	43	201	56	130	252	182	5
P	100.0	6.0	9.0	4.9	16.3	3.2	14.7	4.1	9.5	18.5	13.4	.4
EDUCATION												
UNDER 13 YEARS	160,542	5,726	12,727	3,742	11,898	2,591	9,552	11,902	20,221	49,899	31,852	432
P	100.0	3.6	7.9	2.3	7.4	1.6	5.9	7.4	12.6	31.1	19.8	.3
DURATION												
15 WKS OR MORE	70,047	8,082	7,035	2,701	4,441	1,237	2,569	4,724	7,032	20,820	11,219	187
P	100.0	11.5	10.0	3.9	6.3	1.8	3.7	6.7	10.0	29.7	16.0	.3

Table 19

MINNESOTA DEPARTMENT OF ECONOMIC SECURITY
CHARACTERISTICS OF INSURED UNEMPLOYED, CALENDAR YEAR 1982
BY OCCUPATIONAL CATEGORY

MINNESOTA STATE TOTAL

CHARACTERISTICS	TOTAL	PRIMARY OCCUPATIONAL CATEGORY										
		PROF., TECH., MGR'L.	CLERICAL	SALES	SERVICE	FARM, FISH., FORESTRY	PROCESS	MACHINE TRADES	BENCH WORK	STRUCT. WORK	MISC.	INA
TOTAL	267,940	30,508	25,637	8,533	18,906	3,769	12,438	20,907	32,245	64,296	49,848	853
P	100.0	11.4	9.6	3.2	7.1	1.4	4.6	7.8	12.0	24.0	18.6	.3
FEMALE	79,704	13,048	20,217	3,004	10,837	529	4,602	3,213	16,774	1,763	5,428	289
P	100.0	16.4	25.4	3.8	13.6	.7	5.8	4.0	21.0	2.2	6.8	.4
MINORITIES	8,871	1,147	1,034	149	1,256	96	398	687	1,629	1,158	1,271	46
P	100.0	12.9	11.7	1.7	14.2	1.1	4.5	7.7	18.4	13.1	14.3	.5
AGE												
21 OR YOUNGER	31,500	1,076	3,545	997	3,635	853	1,675	2,315	4,267	7,108	5,925	104
P	100.0	3.4	11.3	3.2	11.5	2.7	5.3	7.3	13.5	22.6	18.8	.3
22 - 54	213,434	27,495	20,117	6,705	13,215	2,540	9,211	16,809	25,204	51,882	39,581	675
P	100.0	12.9	9.4	3.1	6.2	1.2	4.3	7.9	11.8	24.3	18.5	.3
55 - 64	21,429	1,818	1,799	759	1,756	327	1,374	1,696	2,611	5,090	4,129	70
P	100.0	8.5	8.4	3.5	8.2	1.5	6.4	7.9	12.2	23.8	19.3	.3
65 OR OLDER	1,577	119	176	72	300	49	178	87	163	216	213	4
P	100.0	7.5	11.2	4.6	19.0	3.1	11.3	5.5	10.3	13.7	13.5	.3
EDUCATION												
UNDER 13 YEARS	186,814	7,158	15,699	4,224	14,168	2,864	10,769	15,632	27,009	49,451	39,252	588
P	100.0	3.8	8.4	2.3	7.6	1.5	5.8	8.4	14.5	26.5	21.0	.3
DURATION												
15 WKS OR MORE	103,899	13,030	10,811	3,707	6,589	1,543	4,341	7,757	10,845	23,296	21,674	306
P	100.0	12.5	10.4	3.6	6.3	1.5	4.2	7.5	10.4	22.4	20.9	.3

Table 20

MINNESOTA DEPARTMENT OF ECONOMIC SECURITY
CHARACTERISTICS OF INSURED UNEMPLOYED, CALENDAR YEAR 1981
BY INDUSTRY ATTACHMENT

MINNESOTA STATE TOTAL

CHARACTERISTICS	TOTAL	INDUSTRY ATTACHMENT											
		AGRI., FOREST, FISH.	MINING QUARRY	CONST.	DURABLE MANUF.	NON-DUR MANUF.	TRAN., COMM.	WHOLE. TRADE	RETAIL TRADE	FIN., INS, R. ESTATE	SERV.	PUBLIC ADMIN.	INA
TOTAL	220,100	3,688	7,520	52,435	44,378	23,175	9,771	13,329	23,843	4,057	31,691	4,649	1,564
P	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FEMALE	62,866	635	585	1,562	12,289	11,436	1,612	3,201	9,868	2,201	17,343	1,679	455
P	28.6	17.2	7.8	3.0	27.7	49.3	16.5	24.0	41.4	54.3	54.7	36.1	29.1
MINORITIES	7,357	115	30	743	1,432	919	238	340	567	220	2,436	251	66
P	3.3	3.1	.4	1.4	3.2	4.0	2.4	2.6	2.4	5.4	7.7	5.4	4.2
AGE													
21 OR YOUNGER	32,882	890	478	6,643	6,472	4,234	992	2,013	5,639	580	4,062	543	336
P	14.9	24.1	6.4	12.7	14.6	18.3	10.2	15.1	23.7	14.3	12.8	11.7	21.5
22 - 54	168,329	2,498	6,254	41,271	34,614	16,166	8,148	10,268	16,254	3,173	24,939	3,612	1,132
P	76.5	67.7	83.2	78.7	78.0	69.8	83.4	77.0	68.2	78.2	78.7	77.7	72.4
55 - 64	17,526	263	757	4,335	3,140	2,465	606	987	1,771	284	2,384	445	89
P	8.0	7.1	10.1	8.3	7.1	10.6	6.2	7.4	7.4	7.0	7.5	9.6	5.7
65 OR OLDER	1,363	37	31	186	152	310	25	61	179	20	306	49	7
P	.6	1.0	.4	.4	.3	1.3	.3	.5	.8	.5	1.0	1.1	.4
EDUCATION													
UNDER 13 YEARS	160,542	2,949	5,824	40,808	35,164	19,238	7,129	9,086	16,560	2,265	17,705	2,715	1,099
P	72.9	80.0	77.4	77.8	79.2	83.0	73.0	68.2	69.5	55.8	55.9	58.4	70.3
DURATION													
15 WKS OR MORE	70,047	1,419	1,192	18,009	13,893	5,988	3,076	4,672	7,908	1,469	10,438	1,875	108
P	31.8	38.5	15.9	34.3	31.3	25.8	31.5	35.1	33.2	36.2	32.9	40.3	6.9

Table 21

MINNESOTA DEPARTMENT OF ECONOMIC SECURITY
CHARACTERISTICS OF INSURED UNEMPLOYED, CALENDAR YEAR 1982
BY INDUSTRY ATTACHMENT

MINNESOTA STATE TOTAL

CHARACTERISTICS	TOTAL	INDUSTRY ATTACHMENT											
		AGRI., FOREST, FISH.	MINING QUARRY	CONST.	DURABLE MANUF.	NON-DUR MANUF.	TRAN., COMM.	WHOLE. TRADE	RETAIL TRADE	FIN., INS, R. ESTATE	SERV.	PUBLIC ADMIN.	INA
TOTAL	267,940	4,455	14,763	51,370	62,493	26,638	11,704	16,480	28,058	5,310	39,965	4,661	2,043
P	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FEMALE	79,704	751	972	1,825	17,871	12,448	2,493	3,974	11,892	3,037	22,116	1,757	568
P	29.7	16.9	6.6	3.6	28.6	46.7	21.3	24.1	42.4	57.2	55.3	37.7	27.8
MINORITIES	8,871	120	56	684	2,399	1,041	312	326	732	307	2,582	223	89
P	3.3	2.7	.4	1.3	3.8	3.9	2.7	2.0	2.6	5.8	6.5	4.8	4.4
AGE													
21 OR YOUNGER	31,500	955	532	5,129	6,459	4,067	852	1,894	5,889	648	4,185	510	380
P	11.8	21.4	3.6	10.0	10.3	15.3	7.3	11.5	21.0	12.2	10.5	10.9	18.6
22 - 54	213,434	3,182	12,482	41,746	51,143	19,695	10,055	13,169	19,915	4,235	32,632	3,620	1,560
P	79.7	71.4	84.5	81.3	81.8	73.9	85.9	79.9	71.0	79.8	81.7	77.7	76.4
55 - 64	21,429	271	1,704	4,364	4,638	2,596	757	1,347	2,000	400	2,792	468	92
P	8.0	6.1	11.5	8.5	7.4	9.7	6.5	8.2	7.1	7.5	7.0	10.0	4.5
65 OR OLDER	1,577	47	45	131	253	280	40	70	254	27	356	63	11
P	.6	1.1	.3	.3	.4	1.1	.3	.4	.9	.5	.9	1.4	.5
EDUCATION													
UNDER 13 YEARS	186,814	3,496	10,930	39,096	47,867	21,540	7,901	10,734	18,965	2,791	19,473	2,641	1,380
P	69.7	78.5	74.0	76.1	76.6	80.9	67.5	65.1	67.6	52.6	48.7	56.7	67.5
DURATION													
15 WKS OR MORE	103,899	1,783	9,491	18,821	22,851	8,857	4,042	6,674	10,844	2,349	15,870	2,138	179
P	38.8	40.0	64.3	36.6	36.6	33.2	34.5	40.5	38.6	44.2	39.7	45.9	8.8

Table 22

Occupational Characteristics of Experienced and Entry Level Job Applicants in Minnesota
Fiscal Year 1982

OCCUPATIONAL CATEGORY	TOTAL	AGE				ECON DISADV	HANDI-CAPPED	VETERAN		RACE/ETHNIC				
		<22	22-54	55-64	65+			TOTAL	VIET	WHITE	BLACK	HISP.	AM. IND.	ASIAN
TOTAL														
ALL OCCUPATIONS	272,524	94,033	165,858	10,124	2,410	48,315	14,888	31,584	186	248,760	8,601	3,617	3,962	5,083
PROF., TECH., MGR'L	29,414	1,890	26,062	1,226	228	2,857	1,987	4,711	19	27,598	838	217	362	326
CLERICAL	41,882	12,150	27,815	1,566	343	6,131	1,782	1,722	13	39,222	1,511	311	427	313
SALES	12,142	3,441	7,917	647	134	1,417	775	1,531	9	11,753	231	54	31	45
DOMESTIC SERVICE	4,582	2,908	1,321	274	75	1,168	227	48	2	4,190	102	23	127	101
OTHER SERVICE	35,045	13,517	19,589	1,553	378	9,205	2,296	2,689	22	31,298	1,513	438	747	908
FARM, FISH, FOREST	19,981	16,562	3,062	249	81	1,705	296	547	11	19,102	36	251	189	160
PROCESSING	5,626	1,174	4,001	346	101	790	290	710	6	5,194	152	143	46	65
MACHINE TRADES	14,018	2,084	11,257	572	101	2,413	1,167	3,531	16	13,008	344	133	139	358
BENCH WORK	15,335	2,975	11,555	675	126	3,006	801	1,276	6	13,599	568	172	199	752
STRUCTURAL WORK	30,818	5,400	23,805	1,370	234	5,341	2,014	7,336	27	29,186	459	272	636	176
TRANSPORTATION	9,508	1,325	7,614	500	66	1,813	938	2,695	17	9,054	212	82	107	24
PKG. & MAT'L HAND	29,142	12,770	15,246	725	388	8,121	1,627	3,694	33	24,362	2,221	435	826	1,225
MISCELLANEOUS	2,545	343	2,065	119	18	516	191	607	-	2,440	35	17	31	17
NOT REPORTED	22,486	17,494	4,549	302	137	3,832	497	487	5	18,754	379	1,064	95	613
EXPERIENCED														
ALL OCCUPATIONS	261,159	88,096	160,678	9,940	2,350	45,712	14,289	30,972	183	238,702	8,294	3,507	3,611	4,626
PROF., TECH., MGR'L	27,858	1,621	24,795	1,216	220	2,651	1,887	4,600	19	26,160	779	208	339	302
CLERICAL	39,906	11,033	27,001	1,529	335	5,777	1,680	1,682	12	37,395	1,438	288	405	288
SALES	11,456	3,100	7,584	635	134	1,344	721	1,494	9	11,093	225	48	26	38
DOMESTIC SERVICE	4,395	2,797	1,259	262	73	1,086	219	48	2	4,062	90	19	120	72
OTHER SERVICE	32,851	12,009	18,961	1,509	365	8,361	2,180	2,623	21	29,491	1,463	415	582	786
FARM, FISH, FOREST	19,529	16,177	2,997	248	81	1,585	279	538	11	18,710	35	249	144	153
PROCESSING	5,584	1,157	3,977	345	101	781	287	702	6	5,159	150	147	43	65
MACHINE TRADES	13,544	1,879	10,993	569	99	2,296	1,144	3,466	15	12,618	333	130	129	302
BENCH WORK	14,228	2,617	10,850	642	115	2,813	746	1,214	6	12,615	538	163	191	681
STRUCTURAL WORK	30,056	5,079	23,377	1,363	228	5,147	1,973	7,223	27	28,524	440	265	596	151
TRANSPORTATION	9,324	1,231	7,526	498	66	1,774	926	2,669	17	8,879	210	80	104	22
PKG. & MAT'L HAND	27,517	11,638	14,782	705	379	7,793	1,572	3,627	33	22,903	2,184	415	807	1,141
MISCELLANEOUS	2,490	323	2,031	118	18	507	184	600	-	2,388	34	17	30	17
NOT REPORTED	22,421	17,435	4,545	301	136	3,797	491	486	5	18,705	375	1,063	95	608
ENTRY LEVEL														
ALL OCCUPATIONS	11,365	5,937	5,180	184	60	2,603	599	612	3	10,058	307	110	351	457
PROF., TECH., MGR'L	1,556	269	1,267	10	8	206	100	111	-	1,438	59	9	23	24
CLERICAL	1,976	1,117	814	37	8	354	102	40	1	1,827	73	23	22	25
SALES	686	341	333	12	-	73	54	37	-	660	6	6	5	7
DOMESTIC SERVICE	187	111	62	12	2	82	8	-	-	128	12	4	7	29
OTHER SERVICE	2,194	1,508	628	44	13	844	116	66	1	1,807	50	23	165	122
FARM, FISH, FOREST	452	385	65	1	-	120	17	9	-	392	1	2	45	7
PROCESSING	42	17	24	1	-	9	3	8	-	35	2	1	3	-
MACHINE TRADES	474	205	264	3	2	117	23	65	1	390	11	3	10	56
BENCH WORK	1,107	358	705	33	11	193	55	62	-	984	30	9	8	71
STRUCTURAL WORK	762	321	428	7	6	194	41	113	-	662	19	7	40	25
TRANSPORTATION	184	94	88	2	-	39	12	26	-	175	2	2	3	2
PKG. & MAT'L HAND	1,625	1,132	464	20	9	328	55	67	-	1,459	37	20	19	84
MISCELLANEOUS	55	20	34	1	-	9	7	7	-	52	1	-	1	-
NOT REPORTED	65	59	4	1	1	35	6	1	-	49	4	1	-	5

Table 23

Occupational Characteristics of Female Experienced and Entry Level Job Applicants in Minnesota

Fiscal Year 1982

OCCUPATIONAL CATEGORY	FEMALE	AGE				ECON DISADV	HANDI-CAPPED	VETERAN		RACE/ETHNIC				
		<22	22-54	55-64	65+			TOTAL	VIET	WHITE	BLACK	HISP.	AM. IND.	ASIAN
TOTAL														
ALL OCCUPATIONS	114,582	42,333	66,766	4,383	1,067	21,644	3,433	1,054	26	105,408	3,704	1,266	1,627	1,591
PROF., TECH., MGR'L	12,806	977	11,307	431	89	1,428	398	176	2	12,106	315	76	183	102
CLERICAL	35,453	10,385	23,442	1,345	275	5,379	1,095	378	8	33,391	1,163	245	382	196
SALES	5,835	2,082	3,432	256	64	749	154	40	2	5,679	86	20	16	24
DOMESTIC SERVICE	3,298	1,856	1,141	245	54	917	156	15	1	3,001	81	16	97	81
OTHER SERVICE	20,016	7,591	11,307	914	197	5,747	766	134	5	18,529	590	168	424	244
FARM, FISH, FOREST	7,033	6,292	651	58	23	432	34	12	1	6,788	7	69	34	44
PROCESSING	1,979	400	1,333	194	51	289	50	12	1	1,875	29	35	13	19
MACHINE TRADES	1,572	160	1,323	76	13	328	66	43	1	1,460	67	10	17	13
BENCH WORK	8,580	1,386	6,623	488	83	1,756	292	64	2	7,743	297	80	131	311
STRUCTURAL WORK	1,476	473	938	45	19	274	46	58	1	1,394	31	12	35	3
TRANSPORTATION	453	46	389	14	4	127	30	23	-	432	9	1	8	2
PKG. & MAT'L HAND	5,544	2,860	2,376	165	141	2,392	171	57	2	4,046	830	70	238	350
MISCELLANEOUS	578	98	454	23	3	102	21	18	-	553	11	2	9	3
NOT REPORTED	9,959	7,727	2,050	129	51	1,724	154	24	-	8,411	186	462	40	199
EXPERIENCED														
ALL OCCUPATIONS	109,269	39,442	64,471	4,278	1,048	20,343	3,237	1,029	24	100,614	3,565	1,217	1,470	1,457
PROF., TECH., MGR'L	12,051	816	10,723	426	86	1,302	367	169	2	11,397	293	72	171	96
CLERICAL	33,792	9,422	22,781	1,314	269	5,065	1,031	372	7	31,842	1,109	228	361	180
SALES	5,491	1,886	3,292	248	64	708	140	39	2	5,346	85	16	13	21
DOMESTIC SERVICE	3,181	1,811	1,082	233	53	842	149	15	1	2,937	70	12	93	53
OTHER SERVICE	18,701	6,650	10,956	893	196	5,264	724	131	4	17,386	567	155	337	212
FARM, FISH, FOREST	6,888	6,172	626	58	23	387	28	12	1	6,658	7	69	21	44
PROCESSING	1,963	393	1,324	194	51	285	50	12	1	1,863	29	35	10	19
MACHINE TRADES	1,548	153	1,306	76	13	317	65	42	1	1,439	67	10	17	12
BENCH WORK	8,083	1,231	6,304	469	79	1,656	268	59	2	7,309	280	74	125	278
STRUCTURAL WORK	1,418	436	920	43	18	253	46	58	1	1,344	27	12	31	3
TRANSPORTATION	436	43	376	13	4	123	30	22	-	415	9	1	8	2
PKG. & MAT'L HAND	5,229	2,639	2,291	159	138	2,333	167	56	2	3,755	825	69	234	337
MISCELLANEOUS	561	94	441	23	3	100	20	18	-	536	11	2	9	3
NOT REPORTED	9,927	7,696	2,049	129	51	1,708	152	24	-	8,387	186	462	40	197
ENTRY LEVEL														
ALL OCCUPATIONS	5,313	2,891	2,295	105	19	1,301	196	25	2	4,794	139	49	157	134
PROF., TECH., MGR'L	755	161	584	5	3	126	31	7	-	709	22	4	12	6
CLERICAL	1,661	963	661	31	6	314	64	6	1	1,549	54	17	21	16
SALES	344	196	140	8	-	41	14	1	-	333	1	4	3	3
DOMESTIC SERVICE	117	45	59	12	1	75	7	-	-	64	11	4	4	28
OTHER SERVICE	1,315	941	351	21	1	483	42	3	1	1,143	23	13	87	32
FARM, FISH, FOREST	145	120	25	-	-	45	6	-	-	130	-	-	13	-
PROCESSING	16	7	9	-	-	4	-	-	-	12	-	-	3	-
MACHINE TRADES	24	7	17	-	-	11	1	1	-	21	-	-	-	1
BENCH WORK	497	155	319	19	4	100	24	5	-	434	17	6	6	33
STRUCTURAL WORK	58	37	18	2	1	21	-	-	-	50	4	-	4	-
TRANSPORTATION	17	3	13	1	-	4	-	1	-	17	-	-	-	-
PKG. & MAT'L HAND	315	221	85	6	3	59	4	1	-	291	5	1	4	13
MISCELLANEOUS	17	4	13	-	-	2	1	-	-	17	-	-	-	-
NOT REPORTED	32	31	1	-	-	16	2	-	-	24	2	-	-	2

Table 24

Characteristics of Job Applicants in Minnesota

Fiscal Year 1982

AGE AND EDUCATION	TOTAL	ECON DISADV	HANDI-CAPPED	RACE/ETHNIC										WELFARE RECEIP.	FOOD STAMP APPL.
				WHITE		BLACK		HISP.		AM. IND.		ASIAN			
				TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV		
TOTAL.....	272,524	48,315	14,888	248,760	37,295	8,601	4,125	3,617	1,164	3,962	2,246	5,083	3,187	53,713	45,957
EDUCATION BY AGE															
<22 YRS AGE															
<12 YRS EDUC...	49,417	9,919	753	43,427	6,867	1,655	1,266	674	269	799	611	1,293	871	13,077	12,703
12 YRS EDUC....	30,632	3,918	518	29,100	3,253	683	318	264	69	231	114	257	141	6,129	5,354
>12 YRS EDUC...	13,880	1,146	136	13,350	998	250	94	68	10	51	20	77	21	2,973	2,549
22 - 54 YRS AGE															
<12 YRS EDUC...	25,296	9,456	2,155	20,485	6,586	1,209	704	1,068	425	978	598	1,411	1,061	3,531	3,055
12 YRS EDUC....	80,102	15,529	5,881	74,767	13,165	2,490	1,085	767	233	1,102	566	722	388	13,856	11,448
>12 YRS EDUC...	59,985	6,471	3,694	55,694	5,233	2,058	567	473	107	631	252	824	265	12,342	9,356
55 - 64 YRS AGE															
<12 YRS EDUC...	3,831	671	592	3,514	511	97	44	77	27	75	43	59	43	373	356
12 YRS EDUC....	4,250	374	578	4,114	339	60	12	15	2	37	13	7	3	582	488
>12 YRS EDUC...	1,963	136	354	1,897	117	32	9	4	1	16	3	9	5	375	276
65+ YRS AGE															
<12 YRS EDUC...	717	113	73	637	71	22	10	16	5	17	8	23	18	93	96
12 YRS EDUC....	1,111	98	70	1,064	77	22	8	10	5	4	2	7	5	145	101
>12 YRS EDUC...	568	50	58	534	39	13	3	5	1	6	3	8	4	96	74
VETERANS															
TOTAL.....	31,584	5,911	7,515	29,676	5,175	937	326	248	72	622	297	24	13	6,995	5,453
DISABLED.....	8,515	1,584	1,836	8,025	1,399	256	75	62	23	141	76	5	1	1,975	1,511
SPECIAL DISABLED.	17,792	3,334	4,297	16,749	2,924	493	182	134	34	373	176	8	4	3,815	3,013
VIETNAM ERA.....	186	48	5	169	40	4	4	4	2	5	1	1	1	38	34

Table 25

Characteristics of Female Job Applicants in Minnesota

Fiscal Year 1982

AGE AND EDUCATION	FEMALE	ECON DISADV	HANDI-CAPPED	RACE/ETHNIC										WELFARE RECEIP.	FOOD STAMP APPL.
				WHITE		BLACK		HISP.		AM. IND.		ASIAN			
				TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV	TOTAL	ECON DISADV		
TOTAL	114,582	21,644	3,433	105,408	17,009	3,704	2,188	1,266	436	1,627	1,023	1,591	888	21,181	18,657
EDUCATION BY AGE															
<22 YRS AGE															
<12 YRS EDUC...	20,464	4,310	254	17,925	2,962	846	650	260	105	345	277	453	302	5,206	5,286
12 YRS EDUC....	14,380	2,003	202	13,741	1,713	318	156	109	39	93	46	78	40	2,818	2,526
>12 YRS EDUC...	7,450	654	64	7,178	570	148	60	31	6	26	10	30	8	1,589	1,383
22 - 54 YRS AGE															
<12 YRS EDUC...	8,645	3,892	508	6,959	2,789	547	421	311	139	404	283	376	235	941	889
12 YRS EDUC....	33,028	7,148	1,292	30,990	6,089	978	581	279	91	435	251	250	108	5,139	4,376
>12 YRS EDUC...	24,927	2,872	733	23,428	2,386	750	273	156	35	246	112	230	50	4,754	3,614
55 - 64 YRS AGE															
<12 YRS EDUC...	1,365	251	130	1,235	179	45	24	28	12	34	22	21	14	120	121
12 YRS EDUC....	2,171	186	133	2,100	168	27	4	6	-	23	8	3	1	288	228
>12 YRS EDUC...	808	58	69	787	53	12	4	1	-	6	1	1	-	142	99
65+ YRS AGE															
<12 YRS EDUC...	292	45	15	267	29	11	6	5	3	5	4	4	3	36	28
12 YRS EDUC....	529	51	12	508	41	13	6	4	1	1	1	1	1	58	42
>12 YRS EDUC...	242	23	13	230	19	6	2	3	-	2	2	1	-	33	29
VETERANS															
TOTAL	1,054	241	247	997	213	22	14	10	3	16	6	7	5	218	182
DISABLED	328	62	67	314	56	9	6	2	-	-	-	1	-	72	57
SPECIAL DISABLED.	613	145	157	579	130	11	6	8	3	14	5	1	1	126	106
VIETNAM ERA	26	4	1	24	3	-	-	-	-	1	-	1	1	6	7

III. GROUPS TARGETED FOR EMPLOYMENT RELATED SERVICES UNDER JTPA

The Job Training Partnership Act (JTPA), which was passed by Congress and signed by the President in October 1982, makes specific reference to targeted populations to be served by the new Federal-State program of training and employment assistance. Traditionally the State Labor Market Information Summary includes a section on certain groups who encounter special problems or barriers to employment. With JTPA coming on stream with its defined target populations, we found it necessary to change the thrust of our research in this area and direct our attention to developing acceptable methodologies by which reasoned estimates of the JTPA-defined targeted groups could be made. The development of these methodologies was shared by a number of staff in the Research Office. We hope that program plannners and administrators will find the information useful, but ruther refinements in the methodologies and data may be required in the future. Therefore, we welcome any comments or suggestions for improvement.

Defining and Estimating the Targeted Groups For the Job Training Partnership Act

On October 1, 1983, CETA will be replaced by the Job Training Partnership Act (JTPA). The Act's overall purpose is to provide training and job finding assistance to youth and unskilled adults who are economically disadvantaged or otherwise face barriers to employment. According to a mandated formula, under JTPA funding flows directly to the Governor who allocates most of the funds to local units of government called Service Delivery Areas (SDA's).

The Research Office of the Department of Economic Security has estimated the number of persons who fall into various categories targeted for training services in each SDA. The categories defined in the Act are listed below. However, the definitions needed for the methodologies developed to estimate the number of persons in each category, had to be more precise and also compatible with the kinds of data that were available for use in the work-ups. The definitions used for estimating appear in the section on Methodologies For Estimating Target Groups.

Targeted Groups Defined Under JTPA

1. Economically Disadvantaged: Anyone who has, or is a member of a family which has received earnings less than 70 percent of the lower level living standard income level (LLIS), receives food stamps, or is a handicapped adult receiving less than 70 percent of the LLIS but whose family does not.

2. Veterans: Anyone who served in the active military and discharged or released under conditions other than dishonorable.

3. Youth: Anyone between ages 16 and 21.

4. Older Worker: Anyone aged 55 and older.

5. School Dropout: Anyone who is neither attending school nor subject to compulsory attendance and who has not received a high school diploma or GED.

6. Displaced Homemaker: Anyone who has not worked in the labor force for a number of years, but was providing services for family members, and who was on public assistance, or is receiving public assistance because of dependent children in the home, and is having trouble getting or upgrading their employment.

7. Alcoholics or Addicts: No definition.

8. Handicapped: Anyone having a mental or physical disability which results in a substantial barrier to employment.

9. Offender: Anyone who has been subject to any stage of the criminal justice process for whom employment assistance might be beneficial, or who because of previous conviction faces artificial barriers to employment.*

10. Dislocated Worker: Anyone who has been terminated, laid-off or received notice of termination or lay-off, has exhaused their U.I. and are unlikely to return to their previous industry or occupation, ar are long-term unemployed or may face barriers to employment by reason of age.*

11. Limited English Language Proficiency: No definition.*

12. Teenage Parent: No definition.*

Methologies For Estimating Targeted Groups

Economically Disadvantaged

Source of Data: 1980 Census. State Demographer population projections to 1985. U.S. Department of Labor's Bureau of Labor Statistics data on the LLIS.

Methodology: Census estimates of individuals below poverty in 1979 were multiplied by 1.3 to approximate the number of individuals at 70 percent of LLIS. Although the dollar amount of 70 percent of the LLIS is 20 percent above the poverty level, when the distribution of people rather than money is considered, studies have shown that the number of people at 70 percent LLIS is 30 percent greater than the number below the poverty level.

The total number of individuals at 70 percent LLIS was then multiplied by the ratio of the Population 16+ in 1980 to total Population in 1980 to remove those under age 16.

This result was then multiplied by the projected Population 16+ in 1984 as a ratio to the population 16+ in 1980 to account for changes in the working age population between 1980 and 1984.

This figure was finally adjusted to compensate for an expected increase in the incidence of poverty between 1979 and 1984. A national CPS survey suggested that the increase in poverty for urban areas (Mpls-St.Paul, Duluth, and Rochester) would be 5.9 percent, and the increase for rural areas would be 8.3 percent.

---

* Estimates for these target groups have not yet been developed.

In equation form we have:

$$\text{Econ Dis} = \text{below poverty (1979)} \times 1.3 \times \frac{\text{Pop 16+ 1980}}{\text{Total Pop 1980}} \times \frac{\text{Pop 16+ 1984}}{\text{Pop 16+ 1980}} \times \underset{\text{(if urban)}}{1.059} \text{ or } \underset{\text{(if rural)}}{1.089}$$

Youth (16-21)

Source of Data: 1980 Census estimates by age. State Demographer projections for 1985 by age group.

Methodology: There are two ways that this age group could be estimated from the data available. One is to "survive" those aged 12-17 in 1980 to 1984 when they will be 16-21. The other is to interpolate the number of those 16-21 in 1984 using 1980 Census counts and State Demographer projections for 1985.

Aging the 1980 population seemed easier and as accurate as interpolating between the 1980 Census and the 1985 projections, because the age groups used in the projections were 15-19 and 20-24. Because the number of persons of each age within these groups is not equal, there is no accurate way to estimate the number of 16-19 year olds from the 15-19 group and the 20-21 year olds from the 20-24 group for 1980 and 1985 and then interpolate for 1984* using the "survival method." The survival rate from 1980 to 1984 for this age group is .998 which was considered negligible.

When the 1985 estimates of total population based on the 1980 Census differed significantly from those based on the 1970 Census, half of the difference was considered due to migration and used to adjust the estimates of those 16-21.

In equation form we have:

$$\text{Youth (16-21)} = \text{12-17 population in 1980} \times \tfrac{1}{2} \frac{\text{New 1985 Population Est.}}{\text{Old 1985 Population Est.}}$$

Veterans

Source of Data: The Veterans Administration estimates of the number of veterans in 1982 who had served in the various wars and conflicts since WWI, by county.

Methodology: The total number of veterans in 1982 was used as a proxy for the number in 1984.

Older Workers (aged 55 and older)

Source of Data: 1980 Census. State Demographer projections to 1985.

Methodology: The older worker population actually consists of anyone aged 55 or older, whether currently in the labor force or not. Therefore, estimates for 1984 were calculated by subtracting from the number of those 55+ in 1985, one-fifth of the value produced by subtracting the number in 1980 from the number in 1985.

---

* For the State and a few counties, the interpolation method was tried and in each case produced results close to those derived when the 1980 population was aged.

In equation form we have:

$$\text{Older Workers} = \text{Pop 55+ in 1985} - \frac{(\text{Pop 55+ in 1985} - \text{Pop 55+ in 1980})}{5}$$

School Dropout

Source of Data: Department of Education's Information on Minnesota School Dropouts: Published April, 1981. This publication provides, by county, school membership, number of dropouts, and the dropout rate by county. Other sources of information were the 1970 and 1980 Census on level of education.

Methodology: Three estimates of dropouts were made.

1) Recent dropouts (those aged 19 and under), 2) dropouts aged 20 and older, 3) Economically disadvantage dropouts.

1) Recent dropouts (those aged 19 and under): The projected population aged 14-19 in 1984 was divided by the population of 14-19s in 1980 to derive a factor by which the 1980-81 school membership could be adjusted to represent the expected 83-84 school membership. After judging that the 83-84 dropout rate would be the same as for 80-81 (after dropping slightly for 81-82), the 83-84 school membership was multiplied by the 80-81 dropout rate to produce an estimate of the number of recent dropouts in 1984. The total of all recent dropouts for the individual counties was factored to equal the independently derived State total (i.e., the State total was six percent greater than the county total, hence each county was raised by six percent).

In equation form we have:

$$\text{Recent Scho. Drop.} = \frac{\text{14-19 pop in 1984}}{\text{14-19 pop in 1980}} \times \text{80-81 school membership} \times \text{80-81 dropout rate.}$$

2) Dropouts aged 20 and older: For each Economic Development Region, County, or City that comprises a SDA, the number of people 18 years of age and older in 1980 with less than 12 years of education was multiplied by .97 to remove the 18 and 19 year olds and leave an estimate of those 20 years of age and older in 1980 who had less than 12 years of education. This figure was multiplied by the ratio of total population in 1985 to the total population in 1980 in order to roughly adjust the 1980 estimate of dropouts aged 20+ to 1984.

In equation form we have:

$$\text{School Dropouts 20+} = \text{the number 18+ in 1980} \times .97 \times \frac{\text{1985 Population}}{\text{1980 Population}}$$

3) Economically Disadvantaged Dropouts (16+): The ratio of Job Service applicants 22 years of age and older with less than 12 years of education to total Job Service applicants 22 years of age and older was multiplied by the number of economically disadvantaged in 1984 1/ to produce an estimate of the economically disadvantaged in 1984 who were age 22 and older and had less than 12 years of education (on the assumption that the ratio of economically disadvantaged to total for J.S. applicants roughly approximated the ratio for the general population). To account for those aged 20 and 21, this figure was increased by three percent. To this figure was added an estimate of the number of recent dropouts aged 14-19 who were economically disadvantaged. They were estimated by taking the 1970 Census 2/ percentage of persons 16-21 years of age with less than 12 years of education who were below the poverty level times 1.3 which equaled .25. This was increased to .35 because of rising dropout rates since 1970 and the increased numbers of young single parents.

In equation form we have:

$$\text{Econ Disadv Dropouts} = \left[\frac{\text{Econ Dis J.S. Apps 22+ with 12 yrs Ed.}}{\text{Total Econ Dis. J.S. Apps 22+}} \times \text{Econ. Dis. in 1984 22+} \times 1.03\right] + \left[.35 \times \text{1984 \# of recent dropouts.}\right]$$

Displaced Homemaker

Source of Data: The 1980 Census. The March 1976 Survey of Income and Education conducted by the Census Bureau, and published by the Women's Bureau of the U.S. Dept. of Labor.

Methodology: The Survey of Income and Education showed that for the Mpls-St. Paul Met area and the remainder of the State, two percent of the 22-64 year old females were eligible displaced homemakers according to the CETA Title II criteria. We have not been able to determine another method that would produce more reliable results because the data from the CPS is not sufficient or reliable for small area work-ups.

Therefore, each county's population for those aged 22-64 in 1980 was factored to represent 1984 by dividing the total 1984 population by the 1980 population. (Projections by age were not available when this methodology was developed, but the changes in female population 22-64 would closely follow overall population changes). These county population estimates (for females 22-64 in 1984) were multiplied by .02 which was the indidence of disabled homemakers in 1976. The result is an estimate of displaced homemakers aged 22-64 in 1984. An independent total was calculated for the whole State which was close enough (within less than one percent) to the county total that the county total was accepted.

1/ $\text{Total Econ.Dis. 22+ in 1984} = \frac{\text{1980 Census Econ Dis 22+}}{\text{1980 Census Econ Dis 16+}} \times \text{Econ Dis. 16+ in 1984.}$

2/ 1980 Census data unavailable.

In equation form we have:

$$\text{Displaced Homemakers} = \text{Females 22-64 in 1980} \times \frac{\text{Total Pop in 1984}}{\text{Total Pop in 1980}} \times .02$$

Alcoholics or Addicts

Source of Data: The Department of Welfare's publication, Minnesota's Response To Alcohol and Other Drug Problems (1981). The State Demographer's population projections to 1985.

Methodology: There is no defined way of determining exactly who should be counted as an alcohol or chemical user except that it seems reasonable to assume that we are interested in those who are users to the extent that it may interfere with obtaining and/or keeping a job. Therefore, we are estimating what the publication refers to as "problem drinkers" and "problem chemical users". Basically, both groups (which overlap considerably) are in need of formal treatment services.

The Welfare Department divided the State into seven areas, each of which had its own rate of alcohol abusers. (Alcohol plus other drug abusers were estimated to be 20 percent greater than alcohol alone). Each county was assigned the same rate as the area to which it belongs. When these rates were multiplied by the 1984 population, it produced 1984 estimates of problem drinkers. The estimate of chemical users (alcohol plus drugs) was produced by multiplying the number of drinkers by 1.2.

In equation form we have:

Problem Drinkers = Area's rate of alcohol abuse x 1984 population.
Total Alcohol and Chemical Users = Problem drinkers x 1.2.

Handicapped

Source of Data: The 1976 publication, The Assessment of Disability in Minnesota. This publication provides, for the State and each county, both the estimated number of disabled, and the rate of disability among the total population. 1980 Census estimates. State Demographer population projections to 1985.

Methodology: The 1984 population for each county was multiplied by the county rate of disability. The ratio of people aged 16 and older in 1980 to total population in 1980 was used to derive the number of disabled who were of labor force age. The resultant county estimates of handicapped of all ages were factored to sum to the independently derived overall State total.

In equation form we have:

$$\text{Handicapped} = \text{Rate of disability} \times \text{Total 1984 population} \times \frac{\text{16+ pop in 1980}}{\text{Total pop in 1980}}$$

Definitional footnote:

The estimates represent those persons who perceive themselves as being disabled in some way. There seems to be no practical way of determining what portion of these people experience trouble getting employment and have an impairement that limits "one or more major life activities." Many of the disabled who are already employed may have experienced difficulty getting that employment. Many may be working below their skill level. Others may not have a job, nor want or are capable of work.

The 1980 Census provides estimates of noninstitutional persons 16-64 by work disability status, including those in the labor force with a disability, and those not in the labor force who may or may not be prevented from working. Again, there seems to be no practical way to bring Census estimates into alignment with the Job Training Partnership Act concept or with estimates made using the method described above. The Census estimates of disabled are dramatically smaller than the estimates derived by the method above and according to the Census people, not at all accurate.

Offenders: No methodology. No estimates.

Limited English Language Proficiency: No methodology. No estimates.

Teenage Parents: No methodology. No estimates.

Dislocated Workers: No methodology. No estimates.

Methodology For Calculating The Additional Categories Of Minorities And Women For The Governor's Job Training Office

Minorities (aged 16-64 in 1984):[1/] The number of those aged 18-64 in 1980 was posted from the Census. This estimate was increased by three percent to account for those aged 16 and 17. Then the minorities in the counties or cities that comprised each SDA were summed. To approximate the number in 1984, the figure for 1980 was raised by 20 percent to account for the following: 1) an estimated 15 percent undercount of minorities in the Census, 2) suppressed data for counties when the Census sample was small, 3) natural increase in population over the four years.

In equation form we have:

Minorities (aged 16-64 in 1984) = Number in 1980 aged 18-64 x 1.03 x 1.20

Women (aged 16 and older in 1984): The number of women aged 16 and older in 1980 was posted from the Census. Then the data from the counties or cities comprising each SDA were summed. to approximate the number of these women in 1984, we took 80 percent of the population change for women from 1980 to 1985 (using State Demographer projections for 1985) for each Economic Development Region in the SDA and used it to factor the population of women in 1980.

In equation form we have:

$$\text{Women (aged 16 and older in 1984)} = \text{Number aged 16+ in 1980} \times \left[1 + \left(\frac{\#\text{ of women in 1985}}{\#\text{ of women in 1980}} - 1\right)\right] \times .8$$

1/ The Minority category is comprised of blacks, American Indians, Asians, Spanish surname and "other".

Table 26

1984 Estimates Of Targeted Groups Under JTPA

Service Delivery Area (SDA)	Econ. Disadv.	Dis-placed Home-maker	Veteran	Chemical Depend-ent	Youth (16-21)	Older Worker (55+)	Handi-capped	School Dropout			Women Aged 16 and over	Minorities (Ages 16-64)
								Recent (Ages 14-19)	Aged 20 and over	Econ. Disadv.		
Minnesota (Total)	411,278	22,223	554,561	349,802	425,151	868,000	452,156	11,064	726,843	116,658	1,618,900	110,369
1. (Econ Dev Region 1)	14,168	461	11,021	7701	10,371	24,841	9160	175	23,990	4979	36,300	1139
2. (Econ Dev Regions 2,4,5)	73,476	2068	40,990	31,622	47,121	102,632	39,210	774	94,254	19,083	154,200	8333
3. (Econ Dev Region 3	24,027	1292	30,862	19,006	25,270	58,733	22,453	429	46,374	5715	93,250	2309
4. (Duluth)	10,840	475	15,788	8911	10,389	23,612	10,694	229	16,650	2166	39,500	2731
5. (Econ Dev Regions 6E,7E,7W	48,061	2199	45,190	34,932	52,384	89,970	42,380	1156	98,292	13,109	174,900	1903
6. (Econ Dev Region 6W,8	31,656	941	22,960	15,923	22,343	53,855	17,957	348	48,247	11,475	75,700	1557
7. (Econ Dev Region 9)	25,237	1102	29,770	18,383	21,922	52,708	21,564	336	46,207	6512	82,050	2130
8. (Econ Dev Region 10)	39,642	2110	49,470	33,808	42,503	92,892	39,137	835	79,777	10,888	162,000	3982
9. (Hennepin,Carver,Scott, Ctys.)	29,199	3872	104,061	41,080	61,256	112,594	77,906	1699	69,251	7831	256,400	11,496
10. (Minneapolis)	51,266	2155	67,309	51,084	33,756	93,398	48,649	2013	69,415	13,599	164,700	37,237
11. (St. Paul)	30,942	1759	57,622	29,502	19,143	68,055	44,011	1230	51,027	9143	116,500	25,858
12. (Anoka,Ramsey,Washington, Dakota Ctys.)	32,773	3789	79,518	57,850	78,693	94,710	79,035	1840	83,359	12,158	263,400	11,694

APPENDIX

Table 27

Minnesota Labor Force Data, Ufficial CPS Adjusted

Period	Labor Force	Employment	Unemployment Number	Unemployment Rate
Jan 1976	1,762,891	1,627,365	135,526	7.7
Feb 1976	1,768,107	1,638,757	129,350	7.3
Mar 1976	1,782,240	1,652,651	129,589	7.3
Apr 1976	1,847,402	1,730,776	116,626	6.3
May 1976	1,867,546	1,767,125	100,421	5.4
Jun 1976	1,909,459	1,799,509	109,950	5.8
Jul 1976	1,897,590	1,793,889	103,701	5.5
Aug 1976	1,883,157	1,788,142	95,015	5.0
Sep 1976	1,875,449	1,784,048	91,401	4.9
Oct 1976	1,881,841	1,791,949	89,892	4.8
Nov 1976	1,859,882	1,762,591	97,291	5.2
Dec 1976	1,840,435	1,731,197	109,238	5.9
Avg 1976	1,849,000	1,739,000	109,000	5.9
Jan 1977	1,804,109	1,681,522	122,587	6.8
Feb 1977	1,820,356	1,697,928	122,428	6.7
Mar 1977	1,835,054	1,717,221	117,833	6.4
Apr 1977	1,892,981	1,789,039	103,942	5.5
May 1977	1,921,324	1,830,672	90,652	4.7
Jun 1977	1,967,398	1,869,626	97,772	5.0
Jul 1977	1,958,615	1,864,844	93,771	4.8
Aug 1977	1,947,825	1,862,339	85,486	4.4
Sep 1977	1,937,589	1,859,359	78,230	4.0
Oct 1977	1,941,064	1,865,801	75,263	3.9
Nov 1977	1,928,262	1,848,988	79,274	4.1
Dec 1977	1,917,421	1,820,660	96,761	5.0
Avg 1977	1,907,000	1,809,000	97,000	5.1
Jan 1978	1,885,455	1,787,423	98,032	5.2
Feb 1978	1,887,632	1,795,659	91,973	4.9
Mar 1978	1,897,286	1,811,911	85,375	4.5
Apr 1978	1,936,793	1,864,042	72,751	3.8
May 1978	1,983,993	1,914,865	69,128	3.5
Jun 1978	2,045,862	1,968,172	77,690	3.8
Jul 1978	2,052,780	1,980,611	72,169	3.5
Aug 1978	2,030,169	1,966,637	63,532	3.1
Sep 1978	2,016,792	1,958,769	58,023	2.9
Oct 1978	2,006,931	1,950,518	56,413	2.8
Nov 1978	2,000,589	1,928,740	71,849	3.6
Dec 1978	1,991,718	1,908,653	83,065	4.2
Avg 1978	1,979,000	1,903,000	75,000	3.8
Jan 1979	1,949,724	1,853,422	96,302	4.9
Feb 1979	1,957,360	1,865,043	92,317	4.7
Mar 1979	1,968,077	1,877,139	90,938	4.6
Apr 1979	2,006,888	1,921,430	85,458	4.3
May 1979	2,049,044	1,973,066	75,978	3.7
Jun 1979	2,106,947	2,021,648	85,299	4.0
Jul 1979	2,088,890	2,011,714	77,176	3.7
Aug 1979	2,077,002	1,997,572	79,430	3.8
Sep 1979	2,058,084	1,991,659	66,425	3.2
Oct 1979	2,065,019	1,994,028	70,991	3.4
Nov 1979	2,066,747	1,977,135	89,612	4.3
Dec 1979	2,062,219	1,952,145	110,074	5.3
Avg 1979	2,033,000	1,953,000	85,000	4.2
Jan 1980	2,020,509	1,899,727	120,782	6.0
Feb 1980	2,037,822	1,915,889	121,933	6.0
Mar 1980	2,058,847	1,929,930	128,917	6.3
Apr 1980	2,122,240	1,989,600	132,640	6.3
May 1980	2,137,364	2,011,335	126,029	5.9
Jun 1980	2,175,555	2,032,670	142,885	6.6
Jul 1980	2,146,815	2,015,612	131,203	6.1
Aug 1980	2,121,496	2,003,141	118,355	5.6
Sep 1980	2,129,157	2,012,516	116,641	5.5
Oct 1980	2,122,107	2,012,776	109,331	5.2
Nov 1980	2,117,913	2,000,655	117,258	5.5
Dec 1980	2,118,172	1,984,146	134,026	6.3
Avg 1980	2,109,000	1,984,000	125,000	5.9
Jan 1981	2,073,837	1,936,838	136,999	6.6
Feb 1981	2,093,154	1,952,608	140,546	6.7
Mar 1981	2,109,377	1,972,151	137,226	6.5
Apr 1981	2,144,008	2,029,841	114,167	5.3
May 1981	2,181,557	2,071,484	110,073	5.0
Jun 1981	2,225,081	2,106,619	118,462	5.3
Jul 1981	2,197,868	2,092,488	105,380	4.8
Aug 1981	2,170,911	2,072,350	98,561	4.5
Sep 1981	2,173,245	2,075,117	98,128	4.5
Oct 1981	2,167,204	2,061,059	106,145	4.9
Nov 1981	2,153,262	2,031,864	121,398	5.6
Dec 1981	2,146,498	2,005,582	140,916	6.6
Avg 1981	2,153,000	2,034,000	119,000	5.5
Jan 1982	2,093,516	1,937,624	155,892	7.4
Feb 1982	2,115,130	1,949,649	165,481	7.8
Mar 1982	2,130,285	1,955,960	174,325	8.2
Apr 1982	2,168,478	1,999,663	168,815	7.8
May 1982	2,205,503	2,041,974	163,529	7.4
Jun 1982	2,242,121	2,067,287	174,834	7.8
Jul 1982	2,220,552	2,042,936	177,616	8.0
Aug 1982	2,199,158	2,025,558	173,600	7.9
Sep 1982	2,179,549	2,020,044	159,505	7.3
Oct 1982	2,162,674	2,004,396	158,278	7.3
Nov 1982	2,146,035	1,975,638	170,397	7.9
Dec 1982	2,129,001	1,943,271	185,730	8.7
Avg 1982	2,166,000	1,997,000	169,000	7.8
Jan 1983	2,100,048	1,882,947	217,101	10.3
Feb 1983	2,096,376	1,879,447	216,929	10.3
Mar 1983	2,090,455	1,877,481	212,974	10.2
Apr 1983	2,119,238	1,928,928	190,310	9.0
May 1983	2,145,848	1,976,083	169,765	7.9
Jun 1983	2,194,133	2,019,738	176,716	8.0
Jul 1983	2,202,409	2,037,509	164,900	7.5